Carrefour de la Mer

Caraquet, N.B.

Perfectionnement du concept
Etude de rentabilité
Esquisses préliminaires

Revised Concept
Feasibility Study
Preliminary Sketches

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Carrefour de la Mer

Caraquet, N.B.

RAPPORT FINAL / FINAL REPORT

Soumis par /Submitted by

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en association avec/in association with

- W.M.S. Associates Ltd.
- Basic Design Associates (1983) Ltd.

SUMMARY

Tourism in the Acadian Peninsula is extremely important to the economic development of municipalities in the area. The Town of Caraquet is well aware that a tourism infrastructure is required to attract and keep the itinerant tourist. From this point of view, the Acadian Historical Village and other tourism projects were established to increase the region's appeal. The Carrefour de la Mer project is an important component of Caraquet's tourism development.

Subsequent to our analysis, the Carrefour de la Mer project is viable and profitable for the Town of Caraquet.

Approximately 143,000 visitors visited Caraquet during 1983, the majority of which were from Quebec. The economic impact of the tourist is enormous. From the point of view of Caraquet, tourists are particularly interested in activities such as:

1. a day at the beach;
2. fishing;
3. hiking;
4. canoeing;
5. boat trips.

A project like Carrefour de la Mer will cater to the demands of passing tourists. One of the main objectives is to keep the tourist in the area as long as possible. For this, Carrefour has to have an infrastructure capable of answering correctly to demand.

Depending on the occasion or the event, Carrefour de la Mer will become the preferred spot for activities in the Acadian Festival, for exhibitions of all kinds or an outdoor market place for local farmers. Carrefour de la Mer also offers the possibility for tourists to swim in the ocean, to take a boat ride or a high seas fishing trip, or even rent a bicycle or boat.

The costs and revenues of the project suggest that it is self-financing within the first year, giving it a net revenue of $34,822 for a seasonal operation or $12,335 for a year-round operation.

The economic impact of Carrefour de la Mer is significant. From construction, the total effect on the Gross Domestic Product is almost $2.9 million, creating 65 person-years in jobs. The economic impact of Carrefour's operation is approximatly $144,270 in Gross Domestic Product, creating 6 person-years in jobs.

To stay profitable a project like Carrefour de la Mer must have a good marketing strategy and a dynamic administrator able to adapt and manage the site to maximize profits from its operation.

From our point of view, there is no doubt that this project fills a need in the area, and will be counted among other important New Brunswick tourism projects.

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1.0 INTRODUCTION

The Department of Tourism, Recreation and Heritage has assigned Jacques Boucher Architect Ltd along with WMS Associates Ltd and Basic Design Associates Ltd to refine the preliminary concept and program for "Carrefour de la Mer" in Caraquet and to evaluate the financial feasibility of such a facility.

The principal objectives of the study are:

a) To revise the preliminary concept as developed in 1985 by Design Workshop Ltd, with both private and public sectors identified.

b) To prepare a preliminary design.

c) To insure that the project is self-financing within the first year of operation without additional funding from government.

d) To assess resident and non-resident markets for the total concept.

e) To prepare projected capital and operating cost estimates for the proposed development and its individual elements. This cost analysis shall address specific items such as development costs, cost of access, need for water, sewage or power, soil conditions, and any other site aspects.

f) To prepare a financial analysis of the viability of the total project and its individual elements based on projected revenues and operating costs.

g) To estimate the economic impact of the total project including increased tourism expenditures, levels of employment, income and the tax base.

This report includes the results of the concept study and the feasibility study for Carrefour de la Mer in Caraquet. The plans and sketches of the preliminary design are included with the report.

2.0 LOCAL AND REGIONAL TOURISM MARKET ASSESSMENT

This chapter provides a summary of the tourism statistics that relate to the development of Carrefour de la Mer. The capture rate and expenditures are assessed from market type and size, and tourism expenditures.

2.1 Market Type and Size

Surveys done by the New Brunswick Department of Tourism, Auto-Exit Survey - 1983, and by Statistics Canada, Canadian Travel Survey - 1984, along with estimates of the local tourism patterns, provide the information necessary to evaluate the type and size of the tourism market for this project.

Caraquet has the highest visitation rate in the Acadian Peninsula. In 1983, the New Brunswick Auto-Exit Survey estimated the numbers of non-resident visitors passing through Caraquet at 143,000. **WMS** estimated the total number of nights spent by visitors in Caraquet as 76,300 in 1987. The estimate was based on the number of hotel rooms and their occupancy rate, the number of camp sites occupied in 1987, and an estimate of the number of people staying at friends or relatives in the area. This last number is based on the number of visitors staying at friends or relatives in Gloucester County and assessed according to the population ratio between Caraquet and the county. If visitors stayed 2.53 nights in the Town, then 30,218 parties stayed in Caraquet in 1987, or a total of 73,127 individuals. This information is presented in Exhibit 2-1.

Of 51,219 parties or 130,096 individuals from out of province that stayed at least one night in Gloucester County less those who stayed in Bathurst (Auto-Exit survey, 1983), approximately 40% stopped in Caraquet. These visitors stayed an average of 3.75

EXHIBIT 2-1: NUMBER OF VISITORS TO CARAQUET IN GLOUCESTER COUNTY

	Gloucester			Caraquet
	Non-residents	Residents	Total	Total
Number of parties	51,219	51,739	102,958	30,218
Average number of individuals per party	2.54	2.30		2.42
Number of individuals	130,096	119,000	249,096	73,127
Number of nights	192,311	84,783	277,094	76,300
Average length of stay per party	3.75	1.30		2.53

Source: Residents: Canadian Travel Survey, Statistics Canada, 1984.
Non-residents: Auto-Exit Survey, 1983, New Brunswick Department of Tourism, Recreation and Heritage.
Caraquet: WMS Estimates.

nights which reveals a total of 192,311 nights spent in Gloucester. Statistics Canada, 1984, states that New Brunswick visitors from areas other than the Acadian Peninsula, Gloucester County and Alnwick Parish in Northumberland County, spent 119,000 nights in this area.

The tourism information centres attracted 5,041 visitors in Caraquet and 2,629 visitors in Bertrand. It is estimated that only 10% of visitors go to the information centres, thus

approximately 76,500 people visited Caraquet in 1987.

In comparison some 100,000 people visit the Acadian Historical Village and 50,000 the Marine Centre in Shippegan annually. But, not all these visitors are from outside the region, therefore Caraquet attracted more than these two tourist attractions.

Since visitors come from different regions, determining trends in the number of visitors is not possible. Hence, the lack of time-series data prevents the forecasting of future increases in the number of tourists.

In 1983, the average length of stay for non-residents in Gloucester County was 2.5 nights, while for New Brunswick residents travelling within the province, it was an average of 1.3 nights.

Figure 2-1 shows the distribution of visitors according to their region of origin. Quebec is the single most important region of origin for the area's tourism industry. Other major regions of origin, in order of importance, are Ontario, United States, Atlantic Provinces, and the rest of Canada.

2.2 Tourism Expenditures

The tourism expenditures of resident and non-resident parties by category are summarized in Figure 2-2. Even with the slight difference in categories from the different sources, the tourism expenditures per day are similar for both resident and non-resident; but because non-residents stay longer than New Brunswickers travelling within the province, they spend more per trip.

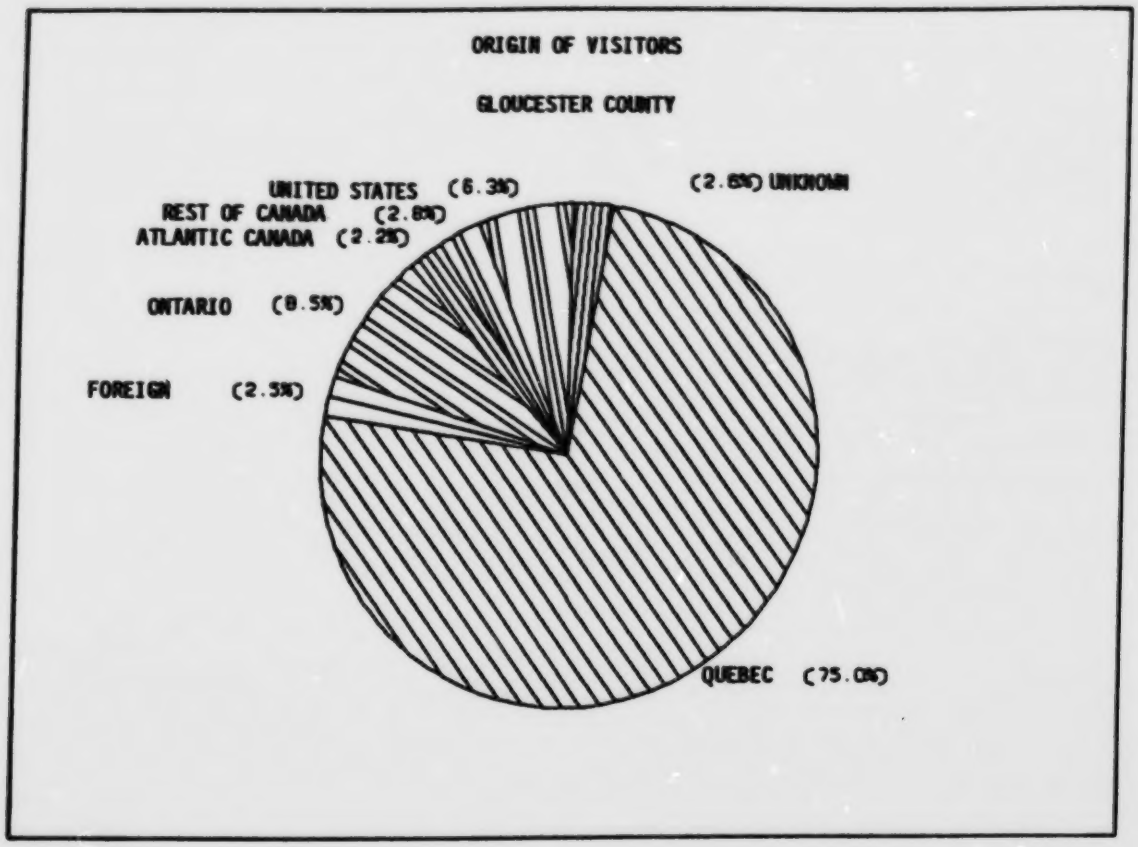

ORIGIN OF VISITORS
GLOUCESTER COUNTY
UNITED STATES (6.3%)
REST OF CANADA (2.8%)
ATLANTIC CANADA (2.2%)
ONTARIO (0.5%)
FOREIGN (2.5%)
(2.6%) UNKNOWN
QUEBEC (75.0%)

FIGURE 2-1

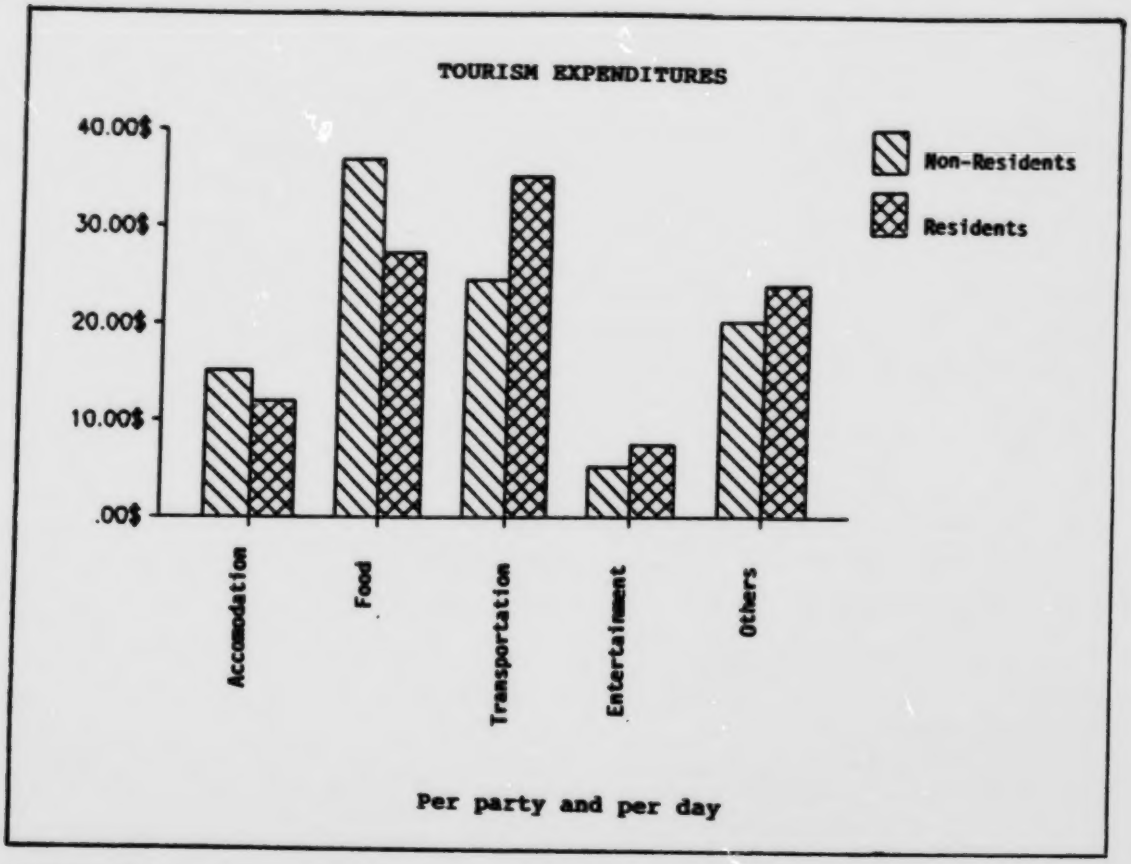

TOURISM EXPENDITURES
40.00$
30.00$
20.00$
10.00$
.00$
Non-Residents
Residents
Accomodation
Food
Transportation
Entertainment
Others
Per party and per day

FIGURE 2-2

Non-resident parties spend $102 per day in Gloucester and residents travelling inside New Brunswick spend $106. The largest expenditures were in the transportation category (gas, etc.). Less is spent on restaurants and food, and even less is spent on accommodations. Tourist parties spend an average of five dollars on recreation and entertainment.

The tourism expenditures of residents are based on provincial data; detailed information is from an area other than Caraquet which should approximate the Caraquet situation. From this average and the estimated number of tourists in Caraquet mentioned above, it is possible to calculate the total tourism expenditures in Caraquet.

2.3 Reason For Visit and Activities

Figure 2-3 summarizes the non-resident reasons for visiting Gloucester County in 1983. The majority of non-resident travellers stated that their main reason for visiting was sightseeing; their secondary reason was seeing friends and relatives. In contrast to other areas of the province, few people pass through the Acadian Peninsula without stopping.

The activities that interest visitors to Gloucester County and the activities they participate in during their stay in New Brunswick are presented in Exhibit 2-2. Swimming is by far the most popular group activity. Other important activities include hiking and fishing, as well as boat rides and sailing, both of which could be included in Carrefour de la Mer.

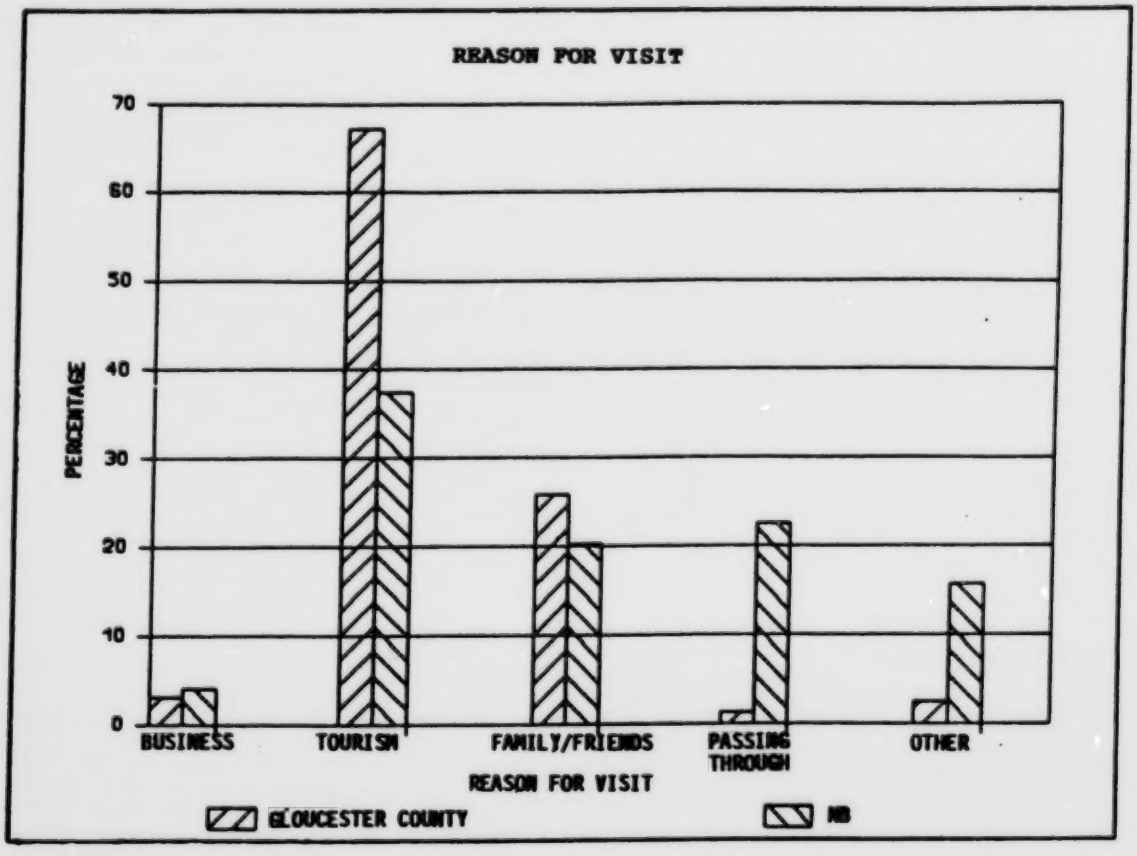

REASON FOR VISIT
70
60
50
40
30
20
10
0
PERCENTAGE
BUSINESS
TOURISM
FAMILY/FRIENDS
PASSING THROUGH
OTHER
REASON FOR VISIT
GLOUCESTER COUNTY
NB

FIGURE 2-3

EXHIBIT 2-2: ACTIVITIES THAT INTEREST TOURISTS VISITING GLOUCESTER COUNTY

	Percentage Participating	Percentage Participating During their Trip to NB
Sailing	17,3	1,3
Canoeing	36,6	2,8
Boat tours	30,1	1,3
Swimming at the Beach	73,1	18,1
Golf	21,8	1,0
Fishing	57,0	2,1
Hiking	50,7	2,5
Sailboarding	3,5	0,0

Source: Auto-Exit Survey, 1983

2.4 Tourism Market

The tourism market includes all the facilities and amenities such as accommodations, restaurants and tourism attractions.

Caraquet is well endowed with accommodation and restaurant facilities, and is in close proximity to the second largest tourist attraction in New Brunswick, the Acadian Historical Village. There are 15 licensed restaurants and take out restaurants, 133 hotel and motel rooms, and 229 campground sites in the Town of Caraquet.

The hotel/motel occupancy rate in Gloucester County is displayed in Figure 2-4; the occupancy rate for the region is 38.2% for 1986 and 40.2% for 1987. The Department of Tourism considers data on Caraquet confidential, therefore it was not available. However, the occupancy rate during off-season in

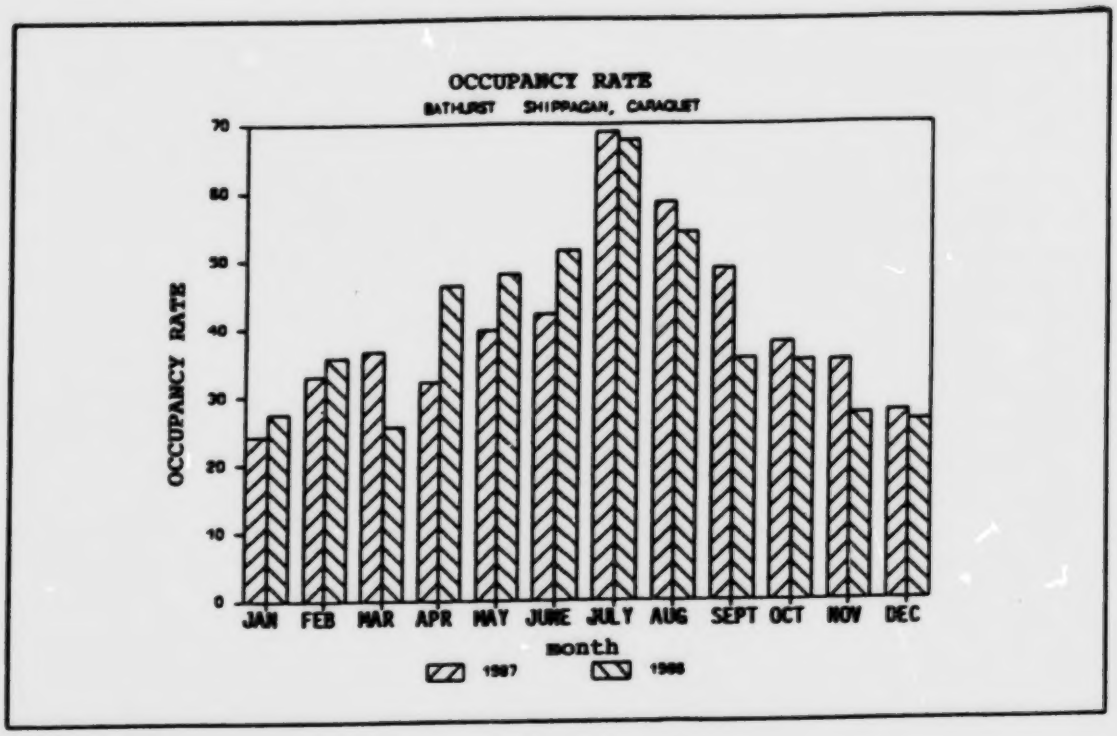

OCCUPANCY RATE
BATHURST SHIPPAGAN, CARAQUET
OCCUPANCY RATE
0
10
20
30
40
50
60
70
JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC
month
1987
1988

FIGURE 2-4

Caraquet should be similar to the provincial occupancy rate even though tourists have problems finding rooms in July and August, even though this fact would tend to indicate a higher occupancy rate than other areas during those two summer months.

The 1985 report: A Tourism Development Strategy for the Acadian Peninsula, by Roche Atlantic for the Provincial Department of Tourism, Recreation and Heritage, found a deficiency in a certain type of accommodation (cabins rented weekly). This type of accommodation would only be profitable if capital costs were low. A profitability study for a lodge is presented in Chapter 6.

2.5 Summary and Capture Rates

There are several things we can conclude from this section. First, accommodations are more profitable on a year-round basis than seasonal basis. Also, of the activities tourists participated in or were interested in, several can be included in the Carrefour concept. The public beach is the most important; sailing, boat rides and possibly windsurfing are other activities to be considered.

We can expect Carrefour de la Mer to attract 50,000 tourists a year; this represents 30% of 143,000 visitors passing through the town plus 60% of visitors who stay in Caraquet in 1987. This capture rate is adequate for the first few years of operation and enables us to prepare a preliminary budget. No doubt the number of visitors could increase considerably in the future, but since Carrefour de la Mer had to be profitable in the first year, a moderate number was necessary.

3.0 INTERVIEW RESULTS

This chapter summarizes the interviews done in the preliminary stage of the study. The interviews were conducted at the end of June 1988 and involved representatives from various government departments, from the business district, and from the artistic and cultural sectors. In all, some 17 interviewees were consulted. The list of respondents and the questionnaire used to structure and guide the discussions are presented in Appendices A and B.

The questions were mainly concerned with the roles and objectives of the project, as well as the programs, services and establishments to be included. Discussions were also directed toward competition with local businesses, management of the establishment, the need for administration, the tourism strategy and government programs which could assist the project. Each topic will be discussed in the following chapter.

3.1 Roles and Objectives of Carrefour de la Mer

Almost all the respondents were in agreement with the main objectives of this venture, to keep tourists in the Caraquet area longer. All of the respondents disliked the notion that tourists were passing through Caraquet without stopping.

All perceived the project in a positive way, even though some expressed concerns on the eventual competition of the endeavour with existing businesses, especially accommodations and restaurants. Other concerns were the lack of direction or priorities in the tourism industry. Even though the respondents recognized that the funding came from an agreement with tourism, some thought that it would be better spent on economic development to create year round jobs rather than on tourism

projects which only perpetuate the already seasonal employment in the area.

Even though agreement was reached on the main objective, the principal role of Carrefour de la Mer was not determined. Some see Carrefour de la Mer as a small tourist village or resort where tourists, mostly families, would find everything they need to retain them in the area. This type of establishment could only be viable in the summer unless winter activities, such as skating and fishing, were organized.

Other respondents believe the success of Carrefour de la Mer lies in its approval by local people as much as its attraction to tourists. They believe visitors who come to the area are more interested in meeting local people than going to a village resort. For them a simple tourist attraction would be useless. They see Carrefour de la Mer as a public meeting place for local people as well as tourists. The respondents agreed on the fact that the tourists are mostly families, so that activities in Carrefour de la Mer should be family-oriented.

Most of the respondents considered that the tourism and social aspects were equally important, and preferred a year long operation of the facilities. They accepted the fact that winter activities would be less frequent, although some individuals expressed a desire to make it work in autumn and in winter. Suggestions included festivities relating to clams or oysters, skating, or smelt fishing.

Everyone agreed on the project's theme even though some suggestions were unrelated. As the harbour seems to be the main attraction in Caraquet, linking the Carrefour project to the wharf is essential in order to promote the fishing industry.

3.2 Development Suggestions

This section covers services, programs and businesses considered by the respondents; hence, certain topics originated directly from the interviews. Everyone consulted talked about plays, entertainment, accommodations, restaurants, crafts, boat trips and the beach. A number of people also discussed subjects like lighting, businesses included in the venture, etc.

3.2.1 Entertainment

Everyone felt there should be entertainment on the site, but there were mixed views as to what kind of facilities were necessary. Most believed the theatre building should be built on the proposed site beside the high school, but some preferred it to be in Carrefour. According to most, the site next to the high school was better because of the costs involved and the presence of adjacent facilities (conference halls, parking, etc.).

The respondents also talked about an outside theatre with a maximum of 300 seats for which Théâtre Populaire d'Acadie (TPA) offered to provide entertainment. Plays for children were the main consideration. Most respondents cited the unfavorable atmospheric conditions, especially the wind, which could restrict such activities; consequently it was felt that the performances should be held inside. When questioned on the possibility of a multi-purpose building which would include a theatre, the respondents offered no comments.

Some mentioned the possibility of erecting a tent similar to that used at the Acadian Festival rather than building a permanent structure. They said little when asked about the possibility of the Acadian Festival holding some events in Carrefour. The

representative from the Acadian Festival replied that they would be willing to hold the big tent events in Carrefour if the facility met their needs.

Generally, the respondents agreed that entertainment for children, such as clowns and jugglers (which TPA said it would supply), could be provided at the site. Live music, or possibly a cabaret, if an adequate restaurant was included in the project, were also mentioned as possibilities to create a more lively atmosphere.

3.2.2 Accommodations

The majority of the respondents proposed cabins or cottages rented out on a weekly basis as suggested in the previous study. Hotels or motels were not recommended. In fact, some objected to the notion of on-site accommodations.

Those who saw Carrefour principally as a public meeting place for tourists and local people found it difficult to perceive accommodations at the site. They believed that accommodating tourists is not part of Carrefour's role, and that accommodations should be provided elsewhere. It was argued that the site lacks sufficient space and that people who rent cabins want quiet surroundings; this would be impossible if Carrefour were open late at night. There was one suggestion that the cabins or cottages be built on Caraquet Island and linked by a ferry to Carrefour.

3.2.3 Restaurants

All respondents except one thought restaurants were acceptable; however, opinions differed on the type of restaurant needed. Some pictured only a take out, others thought there was a need

for an exclusive seafood restaurant. A high class restaurant was thought inappropriate to most respondants who prefered a family restaurant for tourists. They also discussed the possibility of a terrace coffee shop that would interest local people as well as tourists. Some even suggested a picnic area with barbecues so tourists can cook their own food.

3.2.4 Crafts and Souvenir Shops

All respondents agreed that a craft shop would be essential to the Carrefour complex. A craft shop that would sell local goods rather than imported souvenirs was deemed desirable. Some mentioned the possibility of having arts and crafts shows with themes relating to the ocean and the fishing industry even if some feared the Acadian Museum's involvement. An exhibition or interpretive centre on the subject of fishing was also proposed. Another recommendation related to this theme was the creation of a restaurant from an old fishing boat beached in the lagoon.

One popular suggestion was an on-site craft workshop, where visitors could watch craftsmen at work, or where they could participate by making their own crafts.

3.2.5 Boat Rides

All respondents thought that boat rides were necessary to the success of Carrefour de la Mer. Visitors have difficulty finding a boat to go for an excursion out to sea. Among the suggestions for boat rides were a simple boat trip, fishing trips for cod or mackerel, or shuttle trips from Carrefour to Maisonnette beach and/or to Caraquet Island. These ferry trips could help solve the public beach problem in the Caraquet area.

A small dock or marina was also mentioned as a possibility as the marina at Bas Caraquet is apparently full.

3.2.6 Beach

Almost all mentioned the lack of a beach or swimming pool in Caraquet. A swimming pool was considered a necessity for Carrefour, but a ferry boat to other beaches, Maisonnette or Caraquet Island, could solve the problem. A wading pool for children or an outdoor salt water pool was proposed. A simulated beach was also suggested for the swimminng or wading pool. The respondents conscious of the construction costs of an outdoor salt water pool assumed that a fresh water pool would be less expensive.

3.2.7 Other Suggestions

The establishment of a fish market was suggested by most of the people interviewed. Fresh caught fish could be sold at an auction or a market or a spot could be established where local fishermen could sell their catch of the day to local people, restaurants and to tourists. Fishermen have trouble selling bottom dwelling species because fish plants are not interested in small quantities of them. Items sold by the fish market could include local products from the fish plants. The market could also sell fresh fruits and vegetables.

For businesses, suggestions included a rental facility with bicycles, canoes, boats, sailboards and sailboats, including instructors for sailing and sailboarding. Among other recommendations was a convenience store which could provide for the needs of the tourists.

Concerns were voiced for moderate prices, even regulations, so that tourists could be treated fairly.

Among services, a day care was proposed in the initial project, and was also suggested by a few respondents. Other suggestions included an ice rink, walks in the evening (and the need to provide lights for such an activity), and a light and sound show with water fountains.

3.3 Competition

Most respondents thought that keeping tourists in the area would create jobs and increase gross revenues for local businesses. It was thought that the best way to minimize competition was to create an infrastructure that would encourage tourists to spend more either in the Town or in Carrefour de la Mer.

Another way of limiting competition was to persuade local merchants to move into Carrefour de la Mer on a permanent or seasonal basis.

3.4 Administration

Opinions were split concerning the managing of the project. Some thought a private promoter should be in charge and others said the municipality should be responsible for administrating the facility. Several respondents considered that a non-profit organization made up of local businessmen would provide the best direction. In general it was believed that the municipality should pilot and direct the initial stages of the project, then give it to a group of entrepreneurs once the project was well under way. Most of the respondents considered that a dynamic full-time manager was essential to the success of the project.

Those who promoted a municipally related administration were mostly business oriented. They had difficulty imagining how a private sector committee could find the time and energy to administrate such a project when preoccupied by their own enterprises. They also wondered who would absorb the eventual deficit during the first years of operation. Some believed the project could not be cost efficient for the first few years, and questioned how businesses with variable profits could ever agree on rental fees or cost sharing. It was thought that a non-profit organization could take over after the project had been well organized. Most of these respondents thought the municipality should be responsible for services such as cleaning, snow removal, garbage disposal, etc.

The largest group of respondents thought a non-profit organization comprised of businessmen should administer Carrefour de la Mer. Some believed that the municipality should be involved in the beginning, and then the project left to the administrative group. They viewed businessmen as more capable of making the project work than municipal employees. Their opinions varied when asked whether it should be administered by a group of tenants or a by larger undefined group. Their arguments for an independent group involved the unacceptability of imposing an extra burden on the contributors, and that the project should be self-financed except for the amount already allocated for its development.

Some respondents suggested that a promoter be found to take the project in hand from the beginning; if profits are to be made there should be no problem finding interested parties.

3.5 Infrastructure

This question was not answered by all of the resondents. Several requirements mentioned were:

- establishment of water and sewer;
- site accessibility including a third lane for turning left and a traffic light (the road is already wide enough);
- a walkway from Carrefour to the wharf at Caraquet;
- sufficient lighting for late night walks;
- sufficient parking spaces;
- washroom facilities;
- the clearing of a lagoon which would be partly uncovered at low tide;
- the landscaping of adjacent properties.

3.6 Conclusions

Several important conclusions can be drawn from the interviews. Carrefour de la Mer is favourably perceived by those who think the facility can keep tourists in the area longer. Carrefour should be directed toward the local population as well as tourists.

Boat rides and theatre presentations were considered essential facilities to be included in Carrefour de la Mer. This implies that a wharf and an amphitheatre be built on the site. For the other businesses included in Carrefour, opinions were divided erea though several suggestions were made. None of the people interviewed identified any person or business that was ready to set up shop in Carrefour de la Mer. The building design should be flexible enough to integrate different kinds of enterprises or services.

Even though several types of administration were suggested, a permanent staff was perceived as essential to the success of the project; an administration committee comprised of volunteers would not suffice.

4.0 MARKET ANALYSIS

4.1 Objectives

The objective of the market analysis consisted of identifying the types of businesses that could be established in Carrefour de la Mer without creating competition with local businesses.

Businesses were identified by comparing the potential demand with the gross revenues of businesses in Caraquet. If the total gross revenue for a certain type of commerce was lower than the projected sales for such a service (Exhibit 4-1), this represented a shortage that could be supplied by a new establishment in Carrefour; otherwise, the market was saturated and there was no room for the same type of business.

The potential demand was calculated from tourism expenditures and types of expenses by residents and non-residents. These numbers were based on data from the Survey of Family Expenditures from Statistics Canada and revenues of local families in the 1981 Census.

The gross revenues were obtained from a survey of small businesses; when the revenues were not available they were calculated based on data from Statistics Canada.

This next section discusses the precise methodology used for the market analysis ad the last section presents the conclusions drawn from the analysis.

4.2 Methodology

There were several stages in the process used to calculate the types of businesses that would be needed at Carrefour de la Mer.

The first step was to conduct a survey of businesses in Caraquet. The survey sought the following answers:

- the name of the business;
- the type of business;
- the size of the business;
- the gross revenue of the business.

Often, the gross revenues for a business were unavailable. Thus, the second step of the process was to estimate the gross revenues for a particular business based on information from Statistics Canada.

This was done in several ways because of the different types of statistics available. Sales per square foot of similar businesses were multiplied by the size of a particular business when applicable. This method was used for such operations as pharmacies, clothing stores, grocery stores, department stores, etc.

Another approach was used to calculate gross revenues for businesses in the restaurant, catering, and tavern industry since statistics for sales per square foot were unavailable. This method utilized the average sales in New Brunswick for the particular type of business. The gross sales of restaurants, licensed restaurants, take-outs, and bars and taverns were estimated using this technique.

Once gross revenues were calculated, it was necessary to match the business in Caraquet with the categories of expenditure to which they were related. These categories are defined by the Household Surveys Division of Statistics Canada and are presented

in the Survey of Family Expenditures, 1986 (FAMEX) which shows family expenditures for each division.

The next step in the process was to obtain the total income available to spend in the area. Information from the 1981 Census was used to obtain household income in the region. This data was not adjusted for income growth since preliminary results from the 1986 Census show that household income has remained static in New Brunswick. Income was then broken down into the following groups:

- under $10,000;
- $10,000 - $19,999;
- $20,000 - $29,999;
- $30,000 - $39,999;
- $40,000 and over.

Next, the number of families in each income group was applied to The Summary and Selective Detailed Average Expenditure by Family Income Groups, New Brunswick, 1986, from Statistics Canada and a total figure for each expenditure category was calculated.

At this point the expected total spending in each category of Family Expenditure was known. The next step was to obtain the actual spending in the region for each category. This figure was obtained by aggregating the FAMEX categories so that they matched the types of businesses that operate in Caraquet. Then the gross revenues of Caraquet businesses were aggregated and applied to each category. By subtracting the actual sales from the expected sales, a positive number would indicate a possibility of increasing sales in this category. The results are shown in Exhibit 4-1.

EXHIBIT 4-1: ESTIMATED AND EXPECTED SALES

Category of enterprise	Actual* Sales	Projected** Sales	Difference***
Food Purchased in restaurants, etc.	3 403 908	1 788 134	(1 615 774)
Materials	3 610 000	283 580	(3 326 420)
Household furnishings and equipment	2 190 400	1 199 869	(990 531)
Clothing	1 091 616	680 387	(411 229)
Women's wear (14 years and over)	359 000	2 078 081	1 719 081
Men's wear (14 years and over)	600 000	1 125 782	525 782
Boy's wear (4-13 years)	53 200	53 200	
Infants wear (under 4 years)	309 620		(309 620)
Laundry and dry-cleaning	295 200	191 048	(104 152)
Medicinal and pharmaceutical products	6 463 125	2 137 063	(4 326 062)
Personal care services	769 893	533 783	(236 110)
Recreation equipment and associated services	337 095	364 690	27 595
Toys, games and hobby equipment	337 749	800 000	462 252
Photographic goods and services	283 400	162 017	(121 383)
Recreation services	1 215 848	943 385	(272 463)

EXHIBIT 4-1: ESTIMATED AND EXPECTED SALES (CONTINUED)

Category of enterprise	Actual* Sales	Projected** Sales	Difference***
Spectator-Entertainment Performances	1 191 707	388 243	(803 464)
Reading materials and other printed matter	610 160	368 972	(241 188)
Alcoholic beverages served on licensed premises	1 693 364	277 058	(1 416 306)
Miscellaneous gifts: flowers, clothing,toys	1 087 161	916 719	(170 442)
Groceries	14 512 084	14 298 987	(213 097)
Convenience stores	3 514 560	10 360 574	6 846 014

Source: WMS Associates Ltd., 1988
Statistics Canada, Household Expenditure Survey, 1986 (unpublished)

* Estimated from floor area and average sales per unit of area.

** Estimated with population and data from household expenditure survey, Statistics Canada, 1986.

*** Numbers in parentheses are deficits

4.3 Conclusions

From the analysis, there are still some areas which can be exploited by new enterprises in Caraquet such as mens wear, ladies wear and recreational equipment like bicycles. The town also lacks a pastry shop and a book store. When the tourism expenditures are added, opportunities become available for restaurants.

Considering, Carrefour's perspective, a restaurant and a small number of boutiques would not increase competition with other local merchants.

5.0 CONCEPT REFINEMENT

5.1 Introduction

As suggested by the Tourism Development Concept for the Acadian Peninsula (New Brunswick Department of Tourism, 1985), the themes "Acadia" and "ocean" have guided the team in elaborating a concept for Carrefour de la Mer as a year-round recreational and gathering place for the local population and tourists, even if the activities are reduced during the off-season.

The concept refinement integrates the different studies; market, financial, and site analysis. From these studies the concept was refined and presented to the Carrefour de la Mer committee who agreed with the following conditions:

- self-financing in the first year;
- reasonable construction costs;
- the inclusion of profitable enterprises in the complex without competition with local businesses.

A year round operation is necessary for Carrefour de la Mer to be profitable, as shown in Chapter 6.

The initial proposal of a small village with several buildings was not profitable because of high construction cost for individual shop keepers, and the difficulty of controlling matching architectural structures.

Secondly, Carrefour de la Mer was required to be a roofed structure, because of climatic conditions such as wind (see Appendix SA-3, data on wind) and the need for a permanent building to hold the proposed activities.

In summary, the project consists of a multi-purpose building of 2,700 square meters built partially on the lagoon with a wharf, terrace and indoor swimming pool; the many functions will be elaborated later on in this chapter.

5.2 Site Plan

5.2.1 Main Entrance

The main entrance (see Appendix SA-2) should have a sign and a gate with a flag to advertise Carrefour de la Mer entrance.

5.2.2 Parking & Vehicular Circulation

A loop will be included in the parking lot to allow sufficient parking space for buses and trailers. This space allows people to drop passengers next to the School of Fisheries. The road winds through the site and crosses a bridge at the mouth of Robin Brook, and then runs along the School of Fisheries on the west side of the Carrefour. This road allows the parking lot of the school to be used if there is a lack of parking spaces on the site. A dead-end road goes to the swimming pool, service area, accommodations, etc.

5.2.3 Advertising

The School of Fisheries and the Acadian Museum will be used to advertise the site to the majority of visitors coming in from the west. Most of the site will be visible from this entrance creating a first eye contact which will guide them to the main entrance 300 meters away.

5.2.4 Land Meets Water

The land meeting the water is an important element in Carrefour de la Mer. The lagoon will need to be dredged to make it look more natural and to create a beach. A channel will be constructed to allow passage of pleasure boats available for tourists at the proposed wharf in the lagoon.

A small basin would also be created near the entrance of the lagoon where Robin Brook enters the site. The basin is a natural solution to the flux and influx of the tides. It would be situated in the forefront of the Acadian Museum and will permit them to produce some presentations or exhibits on the beach. This body of water will be the focal point for the natural landscaping developed in this sector. It will be the link between the Carrefour de la Mer complex and the Acadian Museum. Since the basin is at the bottom of a hill, it will also allow winter activities such as skating and tobogganning to take place.

5.2.5 Pedestrian Circulation

The starting point for pedestrians is the main parking lot. A visitor leaving his car can take a trail to the fish plant, the wharf, and the fishing fleet, all of which would be explained in brochures; guided tours will be offered if possible.

Another path system takes the tourist through the park, including a picnic area, playground, kids pool with sprinklers and a large lawn area next to the small basin. From there the path goes to different adjacent facilities: swimming pool, Acadian Museum, School of Fisheries, lodge, etc.

The trail system also connects the pier and the proposed observation tower which advances into Chaleur Bay.

5.2.6 Landscaping

The landscaping will include vegetation and materials typical of the natural surroundings of the area:

- evergreens will be planted to create a visual and climatic barrier;
- shrubs will be used on the south end of the site as well as on the hill circling the amphitheatre;
- the lawn area will be composed of different field grasses;
- the materials used will need very little maintenance.

5.2.7 Details

The details of the site will be designed to reinforce the theme of Carrefour de la Mer:

- the paths will be made of compacted sand; the lighting will be with wooden posts and support beams designed to reflect the ambience of the site;
- the main entrance, an important element to the site, will be decorated with lights and flags depicting a party atmosphere;
- the parking lots will be surfaced with gravel;
- the playground, park and site furnishings will depict the ocean theme;
- the bridge will be made of heavy large wooden beams.

5.3 Main Building

The Pavilion which is situated among the port facilities next to the water is made to resemble an old hanger which requires an exposed frame. The avowed goals are:

- to consolidate its functions inside a multipurpose space in a clear and simple manner that relates the site's theme, ocean and fishing;
- to provide a climatic protection by adequately positioning and sectioning the building to protect it from winds without hiding it from the sun;
- to create an outdoor multi-functional area, a kind of open amphitheatre protected from the wind behind the main building, where theatre presentations as well as a market could take place;
- to create a wharf which will act as an extension of the building to the sea (the wharf will be situated in the lagoon but the background will be the ocean);
- to use the wharf for water and sea related activities, but also as a quiet place to relax and view the lagoon.

The tubular steel structure accents the main support system, and the circular columns along with the steel roof complements the maritime appearance of the building. Since the building will be raised some 1500 millimeters from the ground on piers, visitors will think they are on a wharf extending toward the ocean.

The preliminary reports describing the boreholes and soil samples indicate that the Pavilion can be supported on piers or individual footings. A more elaborate drilling program will confirm which foundation is better.

The floor will be of reinforced concrete and will consist of a structural slab on the perimeter and a floor on the ground in the middle.

The water and sewer necessary for the various services and the proposed restaurant of 300 square metres will be connected to the municipal system.

Besides having certain businesses such as a restaurant and shops (see Exhibit 5-1), this building will serve as a public market place, a gallery and an activity centre for the Acadian Festival.

5.4 Other Key Components

Some of the key components include a 90 square metre swimming pool that can accommodate visitors during the summer and be beneficial to the proposed 28 units of accommodation for the winter. Thus, the heated swimming pool of 7.3 metres by 12 metres will be built on the west side of the main building; this will be more appealing to the private sector when construction of the proposed units of accommodations are considered.

The required infrastructure (water, sewer, and parking) for the construction of the units of accommodations will be incorporated into the chosen site.

Finally, the refuse of the dredging of the lagoon to allow boats to enter and move around will be used as landfill to make the contour of the amphitheatre and other landscaped areas.

5.5 Businesses

A number of businesses that could be included in the Carrefour complex were identified in the market and tourism analysis and are as follows:

- licensed restaurant with terrace on the wharf;
- take out;
- convenience store;
- souvenir shop;
- craft shop;
- boat rides and fishing trips;
- bicycle rentals;
- rental of canoes, paddleboats, sailboats and sailboards;
- public market once a week;
- other boutiques such as a pastry shops, bookstore, etc.

The financial analysis in chapter 6 demonstrates that all of these businesses are profitable.

Accommodations such as a lodge with a shared pool rather than small cottages or cabins are proposed because of climatic conditions and a restrictive season.

A fish market has opened after the findings of the previous market study; consequently, the establishment of another fish market would create competition unless one of the existing markets wanted to move to the complex and pay the rent at a competitive rate. The absence of a licensed terrace also reflects the possibility of creating competition, as the market analysis shows a saturated market in the sales of alcoholic beverages.

All these businesses will pay a rent to Carrefour based on the area rented or their gross revenues.

Also, enterprises other than those identified can be included in the complex, and the multi-purpose area is flexible enough to permit a number of other uses. For this reason the 100 square metre area can be heated and booked for winter activities like skating, smelt fishing, cross-country skiing, etc.

5.6 Non-profit Uses

The non-profit uses include certain Carrefour activities and uses which serve only to attract people.

In the main building, the multi-functional space of 1850 square metres can be used for the Acadian Festival during the first two weeks of August, as a public market place once a week during summer or longer if it is deemed feasible, and also for exhibitions currently held in the arena which free it for its original purpose. The multi-purpose area could also be used for a clam or oyster festival in autumn or for smelt fishing in the winter.

Another 100 square metres will be rented out to the municipality for a tourism information centre presently located in the arena.

The outside amphitheatre could also be used for some activities in the Acadian Festival, like summer plays or entertainment for children; these could be held inside during inclement weather.

5.7 Space Allocation

The space allocated to different shops or uses in the complex is presented in Exhibit 5-1.

EXHIBIT 5-1: ALLOCATION OF SPACE FOR DIFFERENT USES IN THE CARREFOUR COMPLEX

Main Building	2700	square metres
Rented space:		
Restaurant	300	
Take out	100	
Tourism Information	100	
Craft Shop	100	
Souvenir	100	
Convenience Store	50	
Book Store	50	
Booking Office	50	
TOTAL	850	square metres
Multi-purpose:	1850	square metres

6.0 FINANCIAL ANALYSIS

This chapter presents the capital costs and the financial analysis for the operation of Carrefour de la Mer and explains the hypotheses that were used. The financial analysis is presented in this chapter for Carrefour and the businesses included in this venture (i.e. accommodations, restaurant, shops, and services). The revenues from Carrefour are based on rents that could be charged to businesses that decide to establish within the facility.

Since Carrefour has to be self-financed during the first year of operation, budgets were based on minimal figures rather than optimistic ones. This method allowed **WMS** to evaluate the minimum of profitability assuring the success of the venture.

6.1 Carrefour de la Mer

6.1.1 Capital Costs

The capital costs and their various components are presented in Exhibit 6-1.

6.1.2 Operating Costs and Revenues

Exhibit 6-2 shows the operating costs and revenues for Carrefour de la Mer on a seasonal and a yearly basis. The financial analysis assumes that the concept is entirely financed under the Canada/New Brunswick Tourism Agreement, implying that there are no amortization costs involved.

The seasonal and year-round operation of Carrefour would result in surpluses of $34,822 and $12,335 respectively. The

direct revenues from the lodge is the source of surplus during summer season and year-round operation.

To ensure that Carrefour de la Mer is profitable in the first year of operation, the municipality should help by supplying services, such as insurance, accounting, legal fees, water and sewer, maintenance, snow removal and a tax break. The cost of services shown in Exhibit 6-2 would have to be assumed by Carrefour if the Town did not help out. Only the restaurant and a 100 square metre room used for various activities should be fully heated in wintertime.

EXHIBIT 6-1: DETAILED CAPITAL COSTS (ESTIMATED IN $ 1988)

1	Services		$290 000
1.1	Water System	$63 000	
1.2	Sewage System	$160 000	
1.3	Sprinkler System	$67 000	
2	Lagoon/Wharf		$508 800
2.1	Dredging	$360 000	
2.2	Wharf	$148 800	
3	Building - Foundation/Structure		$1 055 400
3.1	Pier	$86 400	
3.2	Foundation	$58 000	
3.3	Concrete Slab	$280 000	
3.4	Steel Structure	$250 000	
3.5	Steel Decking	$56 000	
3.6	Interior Finish	$150 000	
3.7	Exterior Finish	$175 000	
4	Bridge		$63 700
5	Road System and parking		$123 000
5.1	10 000 square metres	$123 000	
6	Trails		$37 500
6.1	750 linear metres	$ 37 500	
7	Carrefour Entrance		$43 250
7.1	Concrete	$7 500	
7.2	Flags	$12 000	
7.3	Staging	$5 000	
7.4	Sidewalks	$18 750	
8	Landscaping		$177 340
8.1	Trees	$56 000	
8.2	Landscape	$121 340	

EXHIBIT 6-1: CONTINUED

9	Amphitheatre			$61 750
9.1	Paved Areas	$18 750		
9.2	Interior	$13 000		
9.3	Accessories	$30 000		
10	Main Entrance			$30 000
10.1	St. Pierre Blvd.	$30 000		
11	Observations Lights			$55 000
11.1	Observation Lights	$55 000		
12	Signage			$20 000
12.1	Signs	$20 000		
13	Pool			
13.1	Pool	$140 000		$140 000
14	Electricity			$170 000
14.1	Electricity	$170 000		
15	Mechanical Systems			$115 000
15.1	Plumbing	$75 000		
15.2	Ventilation	$40 000		
16	Professional Services		*	$231 300
16.1	Eight(8%) Percent	$231 300		
		TOTAL.....		**$3 122 540**

* The amount for professional services does not take into account the 5% of total fees for the preliminary concept proposed in this study.

EXHIBIT 6-2: PROFORMA BUDGET OF OPERATING COSTS AND REVENUES, CARREFOUR DE LA MER

	Seasonal Operation		Year Round Operation	
REVENUES				
Lease Revenues				
Craft Shop	$3,750		$3,750	
Boat Rides	$10,000		$10,000	
Bookstore	$865		$5,000	
Tourism Information	$1,731		$1,731	
Boat/Bicycle Rentals	$4,473		$4,473	
Convenience Store	$1,731		$1,731	
Restaurant (Licensed)	$12,500		$30,000	
Restaurant (Fast-food)	$5,000		$5,000	
Total Lease Revenues		$40,050		$61,685
Other Direct Revenues				
Acadian Festival	$12,000		$12,000	
Exhibitions	$4,000		$4,000	
Gift Shop Profits	$16,647		$16,674	
Market revenues	$1,823		$1,823	
Total Direct Revenues		$34,470		$34,470
Services Provided by Municipality		$16,458		$54,248
TOTAL REVENUES		$90,978		$150,403

EXHIBIT 6-2: PROFORMA BUDGET OF OPERATING COSTS AND REVENUES, CARREFOUR DE LA MER (Continued)

VARIABLE COSTS

Assumed by Carrefour	Seasonal Operation		Year Round Operation	
Variable Costs:				
Administrator's Salary	$20,000		$37,675	
Advertising/Marketing	$6,000		$12,000	
Decorative supplies	$2,500		$2,500	
Secretary	$4,000		$4,000	
Sub-Total		$32,500		$54,175
Fixed Costs:				
Bad Debts	$498		$722	
Interest & Bank Charges	$1,200		$5,000	
Provincial Taxes	$1,200		$7,000	
Office Supplies	$500		$500	
Telephone, Fax, telex	$1,050		$4,200	
Electricity	$2,750		$10,250	
Sub-Total		$7,198		$27,672
Assumed by Municipality				
Maintenance	$2,466		$15,492	
Municipal taxes	$6,000		$6,000	
Legal Fees, Accounting	$1,000		$4,500	
Fire Insurance	$1,000		$3,000	
Liability Insurance	$250		$250	
Security	$4,032		$23,296	
Water and Sewage	$1,710		$1,710	
Sub-Total		$16,458		$54,248
TOTAL OPERATING COSTS		$56,156		$138,095
TOTAL REVENUE		$90,978		$150,403
NET REVENUE		**$34,822**		**$12,308**

These services constitute very little revenues or costs for the Town, therefore no budgetary adjustments are needed.

Revenues for Carrefour are received from the Acadian Festival which currently rents a big tent, from exhibitions held previously in the arena, and from souvenir shop profits. Rented spaces to businesses will also generate revenues. Rents will be $10 per square foot, the average in Caraquet, or 10 percent of gross revenues from seasonal businesses which take up very little space.

Operating costs are based on scales from the same type of businesses. The administrator's salary is based on a base salary and a percentage commission on revenues from rent. This procedure will encourage the administrator to maximize the revenues. The cost of advertising and promotion is set at $12,000 to enable the project to be profitable. This amount represents the minimal sum and should be increased if possible. The promotional budgets for the Historical Village and the Marine Centre are in the $30,000 range which is considered insufficient.

6.2 Other Businesses

The following exhibits show the financial analysis for different businesses which could be established in Carrefour.

The number of visitors estimated to pass through Carrefour, 50,000, as described in Chapter 2, was used along with the capture rate to estimate the revenues for most businesses.

6.2.1 Accommodations

A financial analysis was done for accommodation and is summarized in the proforma budgets (Exhibit 6-3). Capital costs and

EXHIBIT 6-3: CARREFOUR DE LA MER - ACCOMMODATIONS, PROFORMA BUDGET (CONSTANT 1988 DOLLARS)

	Seasonal Operation
Revenues:	
Accommodations	$62,361
Bar/lounge	$5,833
Conference/meeting room	$1,667
	$69,861
Operating Costs:	
Staff labour costs	$16,667
Cost of liquor sold	$1,667
Maintenance	$1,333
Electricity	$3,333
Water and sewer	$500
Laundry and dry cleaning	$1,667
toiletries	$417
Advertising/promotion	$1,000
Insurance, F/E	$917
Insurance, liability	$50
Legal and audit	$583
Bank charges	$833
Telephone	$833
Property, business taxes	$4,167
Amortization	$29,682
Total operation costs	$63,649
Net Revenue	**$6,212**

EXHIBIT 6-3: CARREFOUR DE LA MER - ACCOMMODATIONS, PROFORMA BUDGET (CONSTANT 1988 DOLLARS) page 2

	Year 1	Year 2	Year 3	Year 4	Year 5
Revenues:					
Accommodations	$215,242	$218,255	$221,311	$224,409	$227,551
Bar/lounge	$35,000	$35,000	$35,000	$35,000	$35,000
Conference/ meeting room	$10,000	$10,000	$10,000	$10,000	$10,000
Total Revenue	$260,242	$263,255	$266,311	$269,409	$272,551
Operating Costs:					
Staff labour costs	$100,000	$100,000	$100,000	$100,000	$100,000
Cost of liquor sold	$10,000	$10,000	$10,000	$10,000	$10,000
Maintenance	$8,000	$8,000	$8,000	$8,000	$8,000
Electricity	$20,000	$20,000	$20,000	$20,000	$20,000
Water and sewer	$3,000	$3,000	$3,000	$3,000	$3,000
Laundry and dry cleaning	$10,000	$10,000	$10,000	$10,000	$10,000
Toiletries	$2,500	$2,500	$2,500	$2,500	$2,500
Advertising/ promotion	$6,000	$6,000	$6,000	$6,000	$6,000
Insurance, F/E	$5,500	$5,500	$5,500	$5,500	$5,500
Insurance, liability	$300	$300	$300	$300	$300
Legal and audit	$3,500	$3,500	$3,500	$3,500	$3,500
Bank charges	$5,000	$5,000	$5,000	$5,000	$5,000
Telephone	$5,000	$5,000	$5,000	$5,000	$5,000
Property, business taxes	$25,000	$25,000	$25,000	$25,000	$25,000
Amortization	$29,682	$29,682	$29,682	$29,682	$29,682
Total Operating Costs	$233,482	$233,482	$233,482	$233,482	$233,482
Net Revenue	**$26,760**	**$29,773**	**$32,829**	**$35,927**	**$39,069**

amortization are provided by ACOA.

In order to be eligible for either Federal, Provincial, or jointly sponsored subsidy programs, equipment must be purchased. An application will be made for capital assistance to cover 50 percent of the cost of capital equipment and construction. The balance of the capital equipment cost is amortized over a fifteen year period, at an interest rate of 13%. The ACOA Action Program will provide a 6% interest buy-down for seven years. The amortization shown in the proforma budget is based on a 7% interest rate (13% interest rate less the 6% ACOA interest buy-down).

The above assumptions are summarized in Exhibit 6-4, Summary of Source and Application of Funds.

EXHIBIT 6-4: SUMMARY OF SOURCE AND APPLICATION OF FUNDS

"Approved Capital and Equipment Costs	$784,000
Working Capital	$50,000
Total Costs	$834,000
Source of Funds	
Equity (20% of total costs)	$166,800
Capital Assistance (@50% of Approved Capital)	$392,000
Sub-Total	$558,800
Interest Subsidized Loan (@ 7%, AAP, 7 years)	$275,200
Total Funds	$834,800
Annual Payment	$29,682

SOURCE: WMS ASSOCIATES LTD.

The revenues are based on an 80 percent occupancy rate during eight weeks of the peak season, July/August, at a rate of $300 per week or $60 per night with 40 percent rented out nightly, and 60 percent weekly. During the 12 week shoulder season, the occupancy rate is 50 percent and all rooms would be $50 per night; the 32 week off-season or winter season has an occupancy rate of 30 percent at the same rate.

6.2.2 Restaurant

A fast-food and a licensed restaurant would be profitable in Carrefour, as shown in Exhibit 6-5, the proforma budget. A fast-food restaurant could be allowed to operate in Carrefour with concessions of 10 percent and would provide $5,000 in revenues to Carrefour during the summer season. The rent from the restaurant which could be open year-round is essential to the financial feasibility of Carrefour. At a rate of $10 per square foot, it would result in a $30,000 revenue for the project.

6.2.3 Boutiques

As mentioned previously, the gift shop is very profitable (Exhibit 6-6) and profits from this enterprise would be vital to Carrefour's profitability. A net revenue of $16,000 could be made from such a business without creating competition for local businesses.

A craft shop dealing in local goods would also be profitable as shown in Exhibit 6-67 contributing a $3,700 rental revenue to Carrefour.

6.2.4 Services Provided to Tourists

Some of the other profitable businesses are boat excursions (Exhibit 6-8), and rental of recreational equipment such as canoes, sailboats, paddle boats and bicycles (Exhibit 6-9). Given the capture rate of other similar centres, a rental revenue of almost $5,000 could be received from a rental company and $10,000 from boat rides with operators receiving reasonable profits.

Exhibit 6-5(a): RESTAURANT PROFORMA BUDGET (ANNUAL OPERATION)

NUMBER OF PATRONS:	125/DAY	NUMBER OF CLIENTS	75/DAY	
AVG BILL PER PERSON:	$10	AVG BILL PER PERSON	$10	
DAILY MEAL REVENUE:	$1,250	DAILY MEAL REVENUE	$750	
WEEKLY MEAL REVENUE:	$8,750	WEEKLY MEAL REVENUE	$5,250	
TOTAL MEAL REVENUE:	$228,375	TOTAL MEAL REVENUE	$169,313	
LIQUOR REVENUE:	$31,500	LIQUOR REVENUE	$11,813	

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
REVENUES:					
MEALS	$228,375	$237,510	$247,010	$256,891	$267,166
LIQUOR	$31,500	$32,760	$34,070	$35,433	$36,851
GROSS REVENUE	$259,875	$270,270	$281,081	$292,324	$304,017
DIRECT COSTS:					
MANAGER	$17,285	$17,976	$18,695	$19,443	$20,221
COOK	$14,040	$14,602	$15,186	$15,793	$16,425
HOSTESS	$11,232	$11,681	$12,149	$12,634	$13,140
WAITERS	$42,457	$44,155	$45,921	$47,758	$49,669
BUS BOYS/DISHWASHERS	$13,664	$14,211	$14,779	$15,370	$15,985
TOTAL DIRECT COSTS	$98,678	$102,625	$106,730	$110,999	$115,439
OPERATING COSTS:					
MAINTENANCE	$3,740	$3,890	$4,045	$4,207	$4,375
INSURANCE, F/E	$900	$936	$973	$1,012	$1,053
INSURANCE, LIABILITY	$250	$260	$270	$281	$292
UTILITIES AND SERVICES	$4,500	$4,680	$4,867	$5,062	$5,264
COST OF FOOD SOLD	$102,769	$106,880	$111,155	$115,601	$120,225
COST OF LIQUOR SOLD	$10,500	$10,920	$11,357	$11,811	$12,284
RENT	$30,000	$30,000	$30,000	$30,000	$30,000
ADVERTISING/MARKETING	$1,000	$1,040	$1,082	$1,125	$1,170
TELEPHONE	$569	$592	$616	$640	$666
LAUNDRY	$2,600	$2,704	$2,812	$2,925	$3,042
AMORTIZATION	$2,575	$2,575	$2,575	$2,575	$2,575
TOTAL OPERATING COSTS	$159,403	$164,476	$169,752	$175,239	$180,946
NET REVENUE	**$1,794**	**$3,169**	**$4,599**	**$6,086**	**$7,632**

Exhibit 6-5(b): CAPITAL COSTS - LICENSED RESTAURANT

TABLES	$10,000
CASH REGISTER	$1,000
REFRIGERATORS & FREEZERS	$4,000
OVEN	$3,000
GRILL & HOT PLATE	$2,500
TOASTERS	$300
GLASS WASHER	$500
MICROWAVE OVEN	$600
STOVE FAN	$2,000
FRYER	$1,500
STEAM COOKER	$2,000
FOOD MIXER	$1,000
DISH WASHER	$1,500
DISHES AND PANS	$3,000
CONSTRUCTION/RENOVATION	$5,000
TOTAL CAPITAL COSTS	$37,900
6% INTEREST WRITEDOWN	
INTEREST RATE	6.00%
TERM (YEARS)	10
PAYMENT	$5,149

EXHIBIT 6-6: CARREFOUR DE LA MER GIFT SHOP PROFORMA BUDGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
REVENUE				
SALES	$62,500	$65,000	$67,600	$70,304
GROSS REVENUE	$62,500	$65,000	$67,600	$70,304
DIRECT COSTS				
SALES CLERK/CASHIER	$8,376	$8,712	$9,060	$9,422
TOTAL DIRECT COSTS	$8,376	$8,712	$9,060	$9,422
OPERATING COSTS				
FIRE INSURANCE	$150	$156	$162	$169
LIABILITY INSURANCE	$250	$260	$270	$281
UTILITIES & SERVICES	$100	$104	$108	$112
COST OF GOODS SOLD	$31,250	$32,500	$33,800	$35,152
TELEPHONE	$75	$78	$81	$84
INTEREST, BANK CHARGES	$4,375	$4,550	$4,732	$4,921
LEGAL AND AUDIT	$1,000	$1,040	$1,082	$1,125
DISPLAYS/PROMOTION	$250	$260	$270	$281
TOTAL OPERATING COSTS	$37,450	$38,948	$40,506	$42,126
NET REVENUE	**$16,674**	**$17,340**	**$18,034**	**$18,755**

EXHIBIT 6-7: CARREFOUR DE LA MER CRAFT SHOP PROFORMA BUDGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
REVENUES				
CRAFT SALES	$37,500	$39,000	$40,560	$42,182
GROSS REVENUES	$37,500	$39,000	$40,560	$42,182
DIRECT COSTS				
MANAGER	$3,150	$3,276	$3,407	$3,543
SALES CLERK/CASHIER	$2,520	$2,621	$2,726	$2,835
TOTAL DIRECT COSTS	$5,670	$5,897	$6,133	$6,378
OPERATING COSTS				
FIRE INSURANCE	$300	$312	$324	$337
LIABILITY INSURANCE	$250	$260	$270	$281
RENT	$3,750	$3,900	$4,056	$4,218
UTILITIES & SERVICES	$150	$156	$162	$169
MAINTENANCE/CLEANING	$300	$312	$324	$337
DISPLAYS/PROMOTION	$500	$520	$541	$562
TELEPHONE	$90	$94	$97	$101
INTEREST/BANK CHARGES	$150	$156	$162	$169
COST OF GOODS SOLD	$18,750	$19,500	$20,280	$21,091
TOTAL OPERATING COSTS	$24,240	$25,210	$26,218	$27,267
NET REVENUE	**$13,080**	**$13,603**	**$14,147**	**$14,713**

EXHIBIT 6-8: CARREFOUR DE LA MER BOAT RIDE REVENUE PROJECTIONS

VISITORS TO CARREFOUR	50,000
CAPTURE RATE	10.00%
BOAT RIDES	5,000
PRICE PER RIDE	$20
GROSS REVENUE	$100,000
CARREFOUR RENT	$10,000

EXHIBIT 6-9 CARREFOUR DE LA MER BICYCLE/BOAT RENTAL PROFORMA BUDGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4
REVENUES				
BOAT RENTALS				
PADDLE BOATS	$17,640	$18,346	$19,079	$19,843
CANOES	$8,820	$9,173	$9,540	$9,921
SAILBOATS	$9,450	$9,828	$10,221	$10,630
BICYCLES	$8,820	$9,173	$9,540	$9,921
GROSS REVENUE	$44,730	$46,519	$48,380	$50,315
DIRECT COSTS				
STAFF	$8,568	$8,911	$9,267	$9,638
TOTAL DIRECT COSTS	$8,568	$8,911	$9,267	$9,638
OPERATING COSTS				
LIABILITY INSURANCE	$400	$416	$433	$450
MAINTENANCE	$2,958	$3,076	$3,199	$3,327
RENT	$4,473	$4,652	$4,838	$5,032
AMORTIZATION	$1,545	$1,545	$1,545	$1,545
PROMOTION	$1,000	$1,040	$1,082	$1,125
TOTAL OPERATING COSTS	$10,376	$10,729	$11,097	$11,479
NET REVENUE	$25,786	$26,879	$28,016	$29,199

	QUANTITY	PRICE	COST
PADDLE BOATS	13	$1,000	$13,000
CANOES	5	$600	$3,000
SAILBOATS	3	$2,000	$6,000
BICYCLES	6	$125	$750
		TOTAL	$22,750
INTEREST RATE			$6.00%
TERM			10
PAYMENT			$1,545

7.0 ECONOMIC IMPACT ANALYSIS

7.1 Introduction

Tourist attractions have the potential to generate substantial economic impact in their local regions. These impacts include jobs and other consumer activity. Tourist expenditures circulate through the economy and create a "multiplier effect" which can be accurately estimated through a technique called economic impact analysis.

7.2 The Theory of Economic Impact Analysis

Exhibit 7-1 illustrates, in schematic form, the flow of the tourist dollar in a local economy.

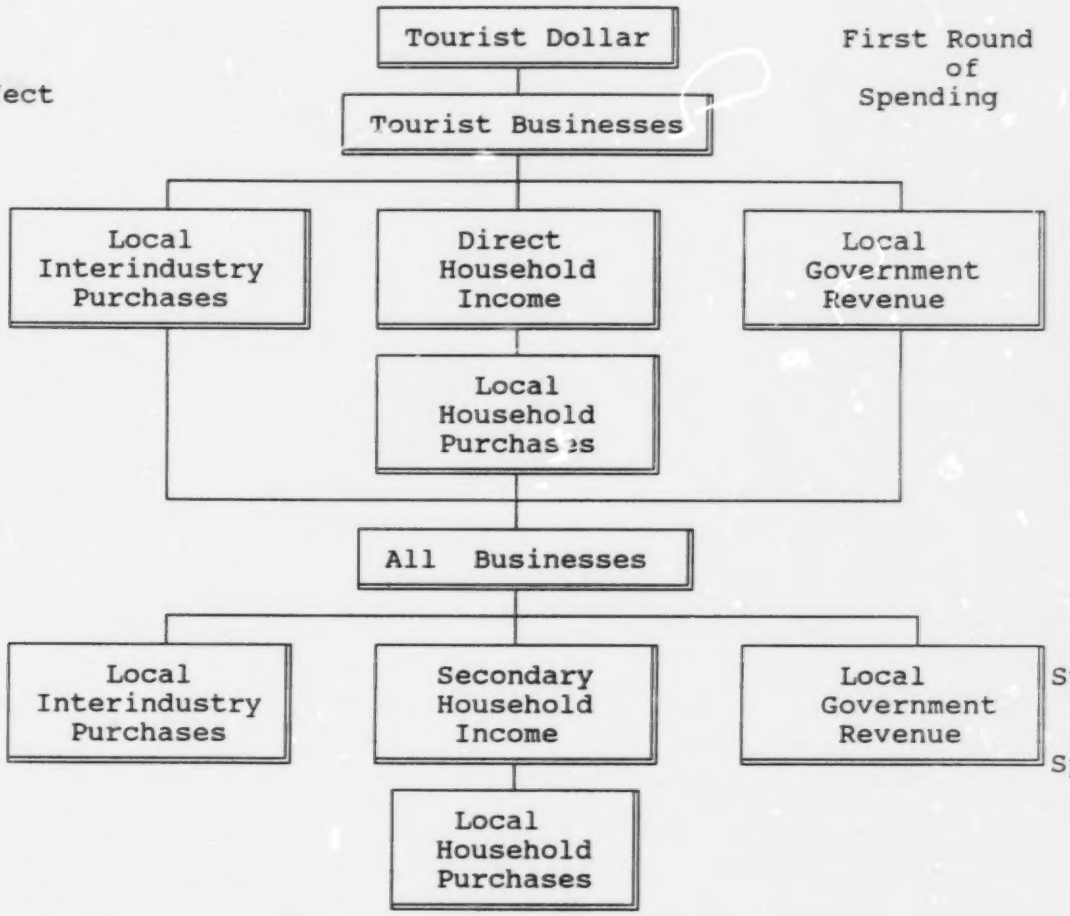
The proposed Carrefour de la Mer will have three types of effects on the economy through its construction and its continuing operation: direct, indirect, and induced. These effects are described below:

The direct, or primary effect, is the initial injection of tourist spending which relates directly to the tourism oriented business.

Indirect effects are created by the amount of initial spending that remains in the local economy in the form of salaries, and purchases of goods and services from local businesses.

Induced effects result from the overall increased economic activity that can be attributed to increased local consumption resulting from the additional income created by the visitors to Carrefour de la Mer.

7-1: THE FLOW OF THE TOURIST DOLLAR IN THE LOCAL ECONOMY



Adapted from J. Lui, "The Economic Impact of Tourism in an Island Economy," p.15

Indirect and induced effects can also be called secondary effects. Together with direct effects, secondary effects create the total economic impact.

7.3 The Economic Impact of Carrefour de la Mer

Exhibits 7-2 and 7-3 summarize the economic impacts of construction and of continuing operations.

7.3.1 Economic Impact of Construction

Every $1000 spent on construction will generate $528 in labour income for the local construction industry. The total effect on labour income in construction is calculated as:

.528 X $4,122,540[1] = $2,176,701

The $4,122,540 includes not only the construction costs of the Carrefour de la Mer project, but also the investments, about one million dollars, necessary for the businesses included in the project.

Similarly every $1000 spent on construction will generate $712 in Gross Domestic Product (GDP), which is the sum total, at factor cost, of all goods and services produced by a nation in a given year. The effect on GDP is calculated as:

.712 X $4,122,540 = $2,935,248

A total of 268 person years in construction are generated for every $10 million dollars spent on construction in New Brunswick. This number must be multiplied by 0.412 to calculate the number of jobs created by spending $500,000 on construction:

268 x 0.412 = 110 person years

---

[1] 3,122,540$ + 1,000,000$ = 4,122,540$

Every $1000 spent in New Brunswick on construction has an effect of $1558 in overall production. Production is also called value of shipments, and it is the total increase in industry shipments which would occur because of the construction and operation of Carrefour. Thus, the effect on production of constructing Carrefour is calculated:

1.558 X $4,122,540 = $6,422,917

In addition to employment created directly by the construction of Carrefour de la Mer, there are person years created indirectly. The multiplier for direct and indirect person years in the construction industry, supplied by Statistics Canada Input-Output Division, is 2.973. The multiplier for indirect employment is therefore 1.973 (i.e. 2.973 - 1.000 = 1.073). Indirect employment is calculated as:

1.973 X 110 = 217 person years

Every $1000 spent at Carrefour de la Mer by tourists will have an effect of $258 on labour income. Thus for Year 1, the effect on labour income is:

.258 X $315,000 = $81,270

The $315,000 is the total gross revenues for the businesses established in the Carrefour.

$458 is the effect on Gross Domestic Product for every $1000 that tourists spend at Carrefour. The effect is calculated as:

.458 x $315,000 = $144,270

For every $10 million spent by tourists in New Brunswick, 202 person years will be created. Thus the direct effect on employment is calculated as:

($315,000 ÷ $10,000,000) X 202 = 6.363

EXHIBIT 7-2: ECONOMIC IMPACT OF CONSTRUCTION

Total Effect on Labour Income: $2,176,701
Total Effect on Gross Domestic Product: $2,935,248
Total Effect on Employment: 110 person years
Total Effect on Production: $6,422,917
Employment Multiplier: 1.973
Total Employment Generated: 217 person years

Source: Statistics Canada, Input-Output Division

EXHIBIT 7-3: ECONOMIC IMPACT OF CONTINUING OPERATIONS

Total Effect on Labour Income: $81,270
Total Effect on Gross Domestic Product: $144,270
Total Effect on Employment: 6.363 person years
Total Effect on Production: $259,245
Employment Multiplier: 2.116
Total Employment Generated: 7.10 person years

Source: Statistics Canada, Input-Output Division

7.3.2 Economic Impact of Continuing Operations

The direct and indirect effects of the continuing operation of Carrefour can be determined using multipliers from Statistics Canada Input Output Division.

Every $1000 spent at Carrefour results in an effect of $823 on production. Thus, the effect on production in Year 1 is calculated as:

.823 X $315,000 = $259,245

Indirect employment will also be created by the ongoing operation of the facilities. The multiplier of total direct and indirect employment generated per direct person year, from Statistics Canada Input-Output Division is 2.116. Thus, the multiplier for indirect employment is 1.116 (i.e. 2.116 - 1.000 = 1.116). The indirect employment generated is calculated:

6.363 X 1.116 = 7.10

8.0 PROMOTIONAL STRATEGY

8.1 Promotion

Since a major factor in evaluating the success of a Carrefour de la Mer is its visitation rate, it will be important to develop an effective advertising and promotional campaign.

This section offers suggestions for a promotional strategy. The intensity of promotions should be high in the beginning of operations in order to achieve an effective market penetration. Thereafter, it will be important to maintain a continuous but less intense level of advertising.

The strategy should be based on both a general approach to the public and a specific approach to target markets.

8.1.1 General Approach

The general approach involves promotion which is geared towards creating awareness of the facility amongst the local and regional population. It should be informative and provide details regarding the services, hours of operation, and types of activities available. It will be important to stress that the facility is family-oriented.

The most effective medium to reach a maximum audience with this information would be (in order): television, radio, and local/regional newspapers. The frequency of ad placement should be several times per week initially, gradually tapering off to once per week or even bi-weekly, particularly in the peak season.

In order to reach the greatest number of households with these media, it may be wise to include a journalist in the Carrefour's executive committee. In this manner the journalist will be aware of all developments as they occur, and will be able to provide the population with accurate press releases.

Site construction could also be filmed, in order to produce a promotional video.

In addition to these initiatives, it will be essential to:

- develop an informative/interesting pamphlet or brochure and subscribe for advertising ads in provincial tourism brochures;

- ensure promotional literature is available at all Tourism Information Centres in the province, and particularly at points of entry (e.g. Saint-Jacques, Campbellton, Woodstock, Cape Tourmentine, etc.);

- provide adequate road signs to the Carrefour;

- participate in promotional initiatives of regional tourism.

8.1.2 Grand Opening

When the facility is opened, subsequent to the completion of construction, a well organized ribbon-cutting ceremony with local dignitaries and politicians in attendance should be used to generate publicity and awareness. Dignitaries could include: Mayor and counsellors of Caraquet, interested Federal or provincial Ministers, interested Senators, local members of

Parliament, representatives of local/regional service clubs, and the executive members of relevant organizations.

8.2 Start Up

A full time administrator is essential to the success of this project, but because of budgetary restraints the Carrefour committee will have to take charge of the start up procedures until Carrefour de la Mer opens.

The administrator should start working once construction is finished and the businesses are in place. This is necessary as Carrefour does not have the means to pay a salary before rents are generating income.

The businesses wishing to be located in Carrefour should be identified and an agreement drawn up for each of them by the committee before the administrator is hired. The administrator would then have a project ready and able to work. In the beginning, the administrator would only be in charge of keeping the operation in good working order; then he or she could take the project further by finding other businesses and activities to increase revenues and promote the project. He or she could also, in the first year, start planning autumn and winter activities.

Besides the start up of the project, the committee's task will be to:

- find businesses and negotiate leases or obtain firm agreements;
- identify activities and obtain commitments from the organizers;
- prepare an initial budget for the first year;
- prepare the promotional plan for the first year;

- hire the administrator; and
- negotiate the interim financing to start up the project.

The committee will have to be transformed into a non-profit organization with an executive committee to which the administrator will report. This will allow Carrefour to obtain contracts and to own land, even though the site of Carrefour and the buildings have to belong to the town of Caraquet to obtain tax shelters. The executive members need to be specified, and could include representatives of Town of Caraquet, the Acadian Festival, Théâtre Populaire d'Acadien, artisans, and merchants. People directly related to the project should also be involved as the success will depend on volunteer work before the administrator is hired. The services of a lawyer will also be necessary to conduct the incorporation process.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The profitability study of Carrefour de la Mer made the following items stand out:

1. Even if the project remains profitable and viable for the municipality of Caraquet, a good marketing strategy will be needed and a good rationale of existing costs.

2. The project will need a dynamic administrator who can maximise profits from the operation of Carrefour, but who can also find future activities that would render the centre even more appealing.

3. The town of Caraquet will have to provide the infrastructure necessary to the site and take care of maintenance. Carrefour de la Mer will also need a tax break and a pardon on municipal service charges.

By following all of these recommendations and taking into account all the items mentioned in the study, the Carrefour de la Mer project shall be able to fulfil the tourist's demands and will be included with other tourism projects making a stand in New Brunswick.

APPENDIX A

List of People Intervewed

M. Gérard Brideau
Commission for Economic Expansion in the Peninsula
Tracadie

M. Germain Blanchard
Mayor, Town of Caraquet
Caraquet

M. Sylvain Bouliane
CAPPA
Caraquet

Mme. Jeannine St.-Cyr
Artisans Coop
Caraquet

M. Yvon Cormier
Théâtre Populaire d'Acadie
Caraquet

M. Fernand Gionet
Chamber of Commerce

Mme. Suzanne Cormier
Caraquet Businessmen Association

M. Jean-Yves Thériault
Acadian Historical Village

M. Roger Frigault
Place Caraquet

M. Claude LeBouthillier
Commercial and Industrial Commission

M. Léopold Chiasson
Acadien Museum

M. Martin Légère
Heritage and Cultural Fondation
of Caraquet

M. Roger F. Cormier
Conseil CARFAC

M. Jules Boudreau
Cent'Art

M. Clarence LeBreton
Shippegan Marine Centre

M. Louis Paul LeBlanc
Richelieu Club
National Bank

APPENDIX B

Interview questionnaire

1. What do you think of the general idea of "Carrefour de la Mer"? How do you think it will work? What potential could this tourist attraction have?

2. What services or programmes do you think should be offered at Carrefour de la Mer or what enterprises should be included?

3. Do you forsee some resistance from businessmen because of the possible competition of this project with local businesses already in place.

4. What is your perception of the tourism industry in the futur in this region? In what direction should the tourism indusdry take? Which markets should be targeted?

5. What would be Carrefour de la Mer's role in the tourism development context in the region and in Caraquet?

ANNEXE B (Continued)

6. Which government programs could give financial support to the project? Would there be any private entrepreneurs that would be interested in participating or investing in Carrefour de la Mer?

_____

_____

_____

7. What do you think the project needs as an infrastructure ?

_____

_____

_____

Ecole des Pêches
Excellente ressource pour le Carrefour de la Mer. On y organise parfois des expositions.

Fisheries School
Excellent resource to complement Carrefour de la Mer -- currently limited interior displays/no exterior displays.

Quai et Flotte de Pêche
Constituant une attraction de grande qualité visuelle, le public y a accès, mais des conflicts potentiels existent entre pêcheurs et touristes, spécialement à cause du manque de place de stationnement.

Wharf and Fishing Fleet
High quality visual attraction. The public has access but potential conflict existing between fishermen and tourists, especially tourist vehicles/no parking area.

Boîte-Théâtre
Excellent historical fisheries building currently an adaptive reuse as a live theatre.

Boite-Théâtre
Le théâtre est installé dans un bâtiment historique ayant servi pour la pêche.

Marine Museum
A key resource to the Carrefour de la Mer concept. The building is visually outdated, needs updating -- the museum has no outdoor displays.

Musée Acadien
La Musée est une clef dans le concept du Carrefour de la Mer. Le bâtiment aurait besoin de rénovations au niveau de son aspect extérieur.

Acadian Village
A major regional tourist attraction. An inland settlement where certain fishing aspects are represented.

Village Acadien
Attraction touristique régionale majeure où certains aspects de la pêche sont représentés.

Expansion Future de l'Usine de Poissons
Les plans devront correspondre à la nouvelle désignation de zone touristique. Des considérations spéciales seront données à l'accessibilité, la sécurité et l'apparence visuelle.

Future Fish Plant Expansion
Plans should respond to the new designation of this area as a tourist attraction. Special consideration to be given to accessibility, safety and visual appearance.

L'Usine de Poissons
La transformation du poisson est un aspect important du Carrefour de la Mer. L'usine n'est habituellement pas accessible aux touristes. L'aire de déchargement est hazardeuse.

Fish Plant
Fish processing is an important aspect of Carrefour de la Mer. The plant is currently inaccessible for tourists. The unloading area is hazardous.

JACQUES BOUCHER ARCHITECTE LTEE

wms associates ltd.
ENVIRONMENTAL CONSULTANTS AND SCIENTISTS

BDA Basic Design Associates Ltd.
Landscape Architecture - Urban Design
Site and Environmental Planning

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e0e 1p0 (506) 433-5821

project

CARREFOUR DE LA MER
CARAQUET, N.B.

drawing

Analyse de l'Utilisation du Site Environnant

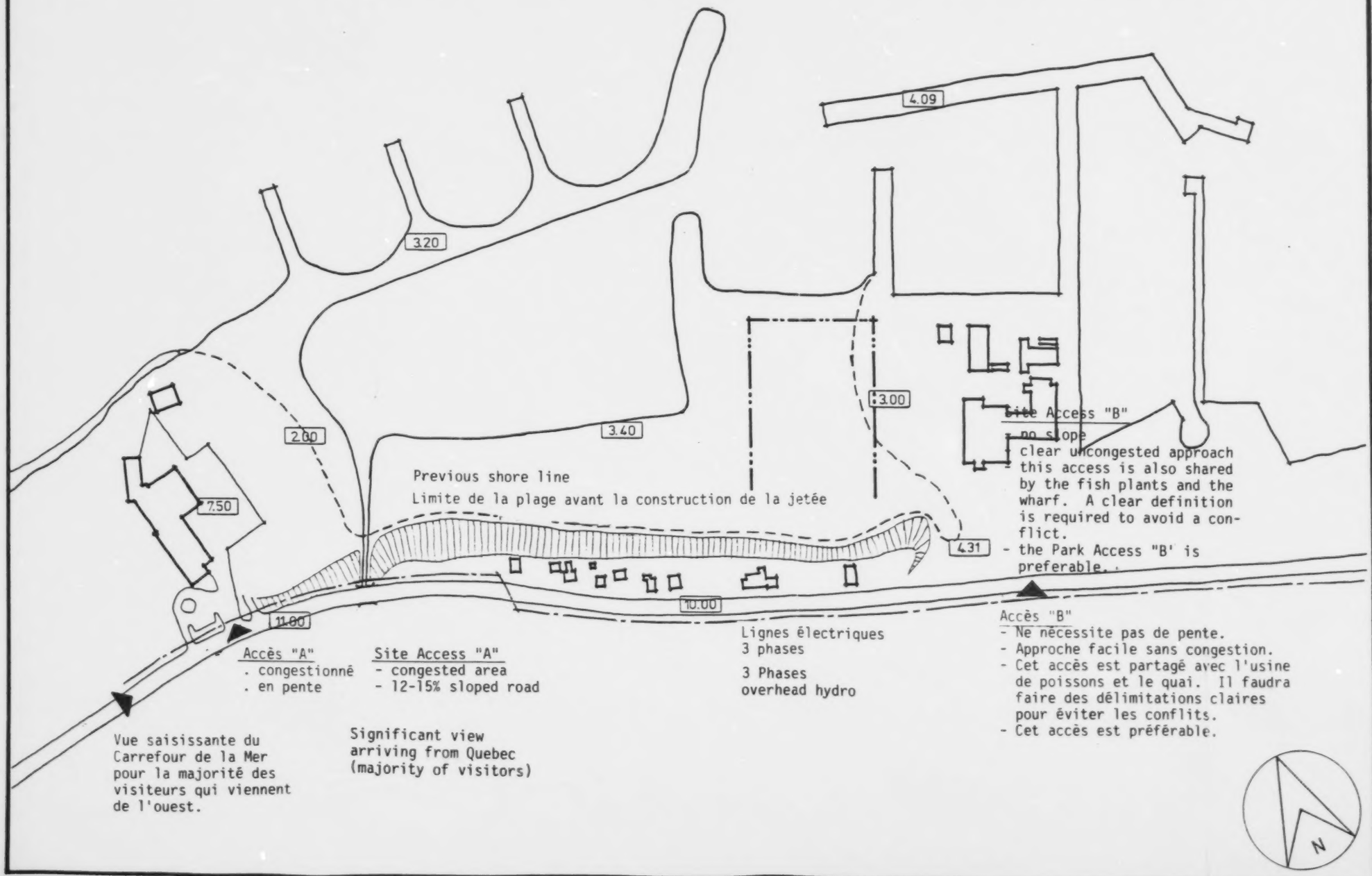
SITE ANALYSIS
SURROUNDING LAND USE

scale 1:3000 m.

date JULY 1988

dwg. no.

SA-1


4.09
320
3.00
2.00
3.40
7.50
4.31
10.00
11.80
Previous shore line
Limite de la plage avant la construction de la jetée
Site Access "B"
- no slope
- clear uncongested approach this access is also shared by the fish plants and the wharf. A clear definition is required to avoid a conflict.
- the Park Access "B' is preferable.
Accès "A"
. congestionné
. en pente
Site Access "A"
- congested area
- 12-15% sloped road
Lignes électriques
3 phases
3 Phases
overhead hydro
Accès "B"
- Ne nécessite pas de pente.
- Approche facile sans congestion.
- Cet accès est partagé avec l'usine de poissons et le quai. Il faudra faire des délimitations claires pour éviter les conflits.
- Cet accès est préférable.
Vue saisissante du Carrefour de la Mer pour la majorité des visiteurs qui viennent de l'ouest.
Significant view arriving from Quebec (majority of visitors)
N

0.00
EXISTING ELEVATIONS

JACQUES BOUCHER ARCHITECTE LTEE

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project

CARREFOUR DE LA MER
CARAQUET, N.B.

drawing

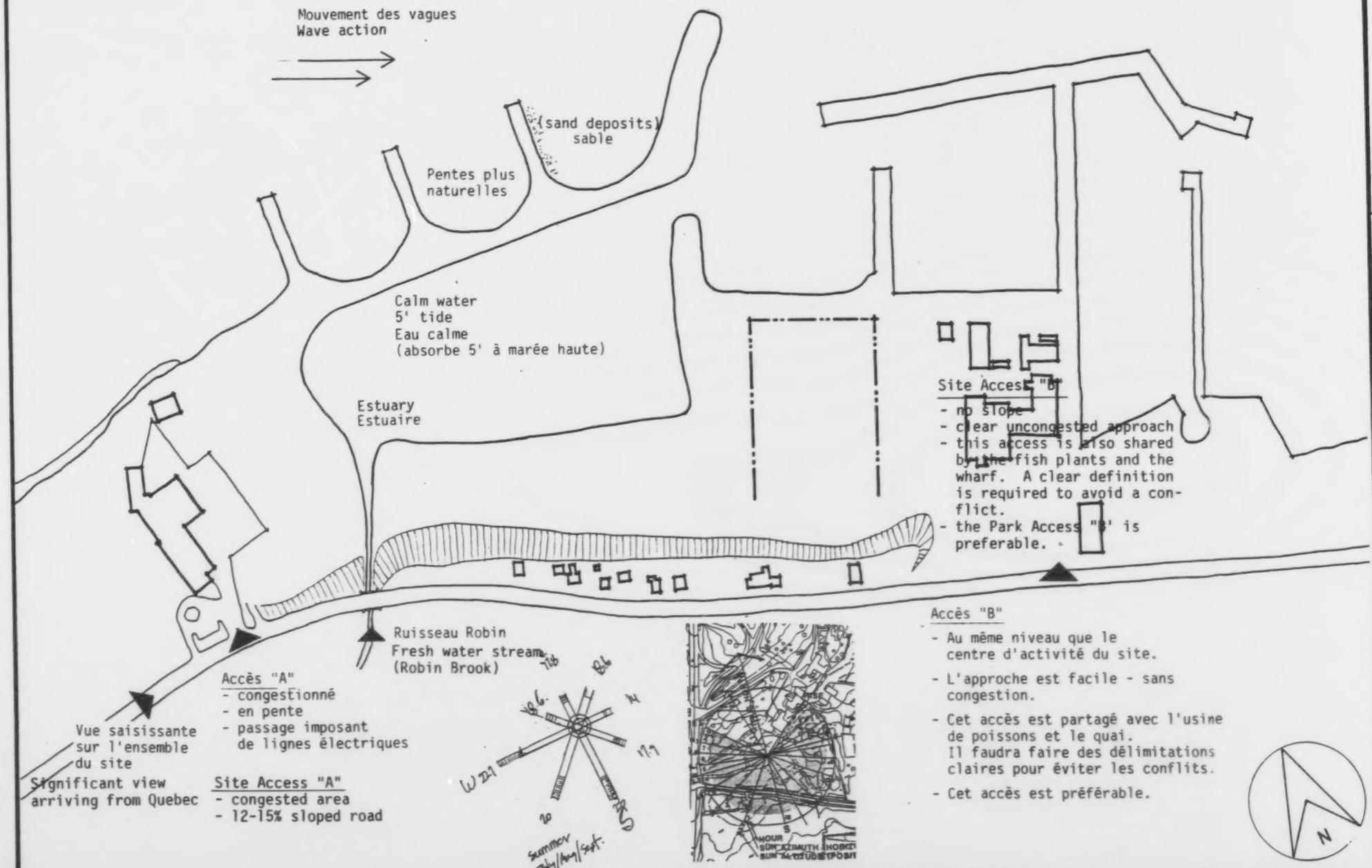
Analyse du Site
Conditions du Site

SITE ANALYSIS
SITE CONDITIONS

scale 1:3000 m.

date JULY 1988

dwg. no. SA-2


Mouvement des vagues
Wave action
(sand deposits)
sable
Pentes plus
naturelles
Calm water
5' tide
Eau calme
(absorbe 5' à marée haute)
Estuary
Estuaire
Site Access "B"
- no slope
- clear uncongested approach
- this access is also shared by the fish plants and the wharf. A clear definition is required to avoid a conflict.
- the Park Access "B" is preferable.
Ruisseau Robin
Fresh water stream
(Robin Brook)
Accès "A"
- congestionné
- en pente
- passage imposant de lignes électriques
Vue saisissante
sur l'ensemble
du site
Significant view
arriving from Quebec
Site Access "A"
- congested area
- 12-15% sloped road
Accès "B"
- Au même niveau que le centre d'activité du site.
- L'approche est facile - sans congestion.
- Cet accès est partagé avec l'usine de poissons et le quai. Il faudra faire des délimitations claires pour éviter les conflits.
- Cet accès est préférable.
N

JACQUES BOUCHER ARCHITECTE LTEE

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project

CARREFOUR DE LA MER
CARAQUET

drawing

Analyse du Site
Conditions Environnementales

SITE ANALYSIS
ENVIRONMENTAL CONDITIONS

scale 1:3000 m.

date JULY 1988

dwg. no.

SA-3

CARREFOUR DE LA MER, Caraquet, N.B.

WIND DATA, Dept. of the Environment, Province of New Brunswick

MISCOU ISLAND (AUT) N.B.

PERIOD 1964-80 PERIODE

Lat 48°01'N Long. 064°30'W

Elevation 5 m Altitude

	JAN JANV	FEB FEV	MAR MARS	APR AVR	MAY MAI	JUN JUIN	JUL JUIL	AUG AOUT	SEP SEPT	OCT OCT	NOV NOV	DEC DEC	YEAR ANNUEL	
PERCENTAGE FREQUENCY FREQUENCE EN %														
N	12.0	10.2	13.9	14.4	10.0	7.8	5.0	6.6	8.2	10.3	12.4	15.0	10.5	N
NE	8.5	9.0	10.1	15.6	16.4	14.0	6.9	9.3	10.2	8.3	12.5	9.9	10.9	NE
E	4.5	5.6	7.0	8.6	11.9	7.4	6.6	7.6	6.5	6.6	4.4	3.9	6.7	E
SE	5.0	7.0	7.8	8.1	12.5	13.9	14.0	10.0	8.5	6.4	7.2	7.0	9.0	SE
S	10.3	12.3	13.8	15.5	16.7	21.2	24.8	17.4	14.9	13.6	12.1	10.2	15.2	S
SW	16.5	15.6	11.6	9.1	11.0	16.9	18.0	19.0	18.8	16.3	12.4	12.4	14.8	SW
W	29.0	32.0	24.7	19.8	14.4	12.8	20.6	23.4	24.5	28.6	27.6	26.2	23.6	W
NW	13.9	8.1	11.0	8.7	6.9	6.0	4.0	6.6	8.1	9.8	11.2	15.2	9.1	NW
Calm	0.3	0.2	0.1	0.2	0.2	0.0	0.1	0.1	0.3	0.1	0.2	0.2	0.2	Calme
MEAN WIND SPEED IN KILOMETRES PER HOUR VITESSE MOYENNE DES VENTS EN KILOMETRES PAR HEURE														
N	27.2	25.5	25.4	21.3	19.6	19.0	14.2	18.2	21.0	26.6	27.9	30.6	23.0	N
NE	25.9	25.9	24.5	21.2	19.4	19.8	16.3	18.1	21.6	22.4	29.5	31.0	23.0	NE
E	25.5	21.1	16.6	14.4	14.9	13.6	12.0	12.2	17.8	16.6	22.1	27.0	17.8	E
SE	24.3	25.2	20.6	16.6	17.8	17.8	16.9	17.1	19.9	20.3	23.1	25.7	20.4	SE
S	18.4	20.6	19.5	17.7	19.2	21.3	21.8	20.1	20.2	19.8	19.5	17.1	19.6	S
SW	23.2	21.7	22.4	20.7	21.3	21.0	20.1	19.7	21.3	21.9	21.6	22.0	21.4	SW
W	27.4	30.2	25.8	24.1	23.2	21.4	22.7	22.1	23.3	26.3	27.9	30.0	25.4	W
NW	25.5	25.8	25.4	22.7	22.7	19.6	15.7	18.3	22.6	26.2	26.8	27.5	23.2	NW
All Directions	25.0	25.5	23.2	20.3	19.6	19.7	19.3	19.1	21.3	23.3	25.5	27.1	22.4	Toutes directions
Maximum Hourly Speed	80	105	92	61	66	61	60	61	71	137	89	105	137	Vitesse horaire maximale
	SW	W	NW	W	W	N	W	SW	NE	N	NE	N	N	

Height of anemometer 10.1 m hauteur de l'anémomètre

STATION INFORMATION

Station is located on the north side of Miscou Island at the head and on the south side of Chaleur Bay. The terrain is flat, alternate bog and low scrub conifers.

DONNÉES RELATIVES À LA STATION

La station se trouve sur le côte nord de l'île Miscou, à la tête et du côte sud de la baie des Chaleurs. Le terrain est plat et les marécages y alternent avec les conifres rabougris.

BELLEDUNE N.B.

PERIOD 1971-80 PERIODE

Lat. 47°54'N Long. 065°50'W

Elevation 8 m Altitude

	JAN JANV	FEB FEV	MAR MARS	APR AVR	MAY MAI	JUN JUIN	JUL JUIL	AUG AOUT	SEP SEPT	OCT OCT	NOV NOV	DEC DEC	YEAR ANNUEL	
PERCENTAGE FREQUENCY FREQUENCE EN %														
N	1.2	1.5	2.6	2.3	1.5	1.9	1.2	1.0	1.3	1.3	1.8	1.0	1.5	N
NE	4.4	5.3	7.4	8.1	12.6	11.7	8.5	7.7	7.7	8.0	7.2	5.0	7.8	NE
E	5.6	7.9	11.4	13.9	15.6	10.7	7.4	8.8	5.2	4.3	4.1	4.7	8.3	E
SE	9.1	8.7	12.7	15.6	23.6	24.8	18.0	16.4	15.3	10.1	9.9	11.4	14.6	SE
S	3.7	2.8	2.7	2.1	3.7	6.2	7.4	4.9	6.2	6.0	4.1	3.7	4.5	S
SW	20.1	12.8	8.6	6.9	7.6	12.8	21.4	19.2	22.2	23.7	22.7	20.3	16.5	SW
W	48.9	49.3	38.8	34.9	18.6	17.8	21.1	24.4	27.3	27.4	34.6	43.3	32.2	W
NW	6.3	11.4	15.2	15.9	16.4	13.6	14.6	17.2	14.3	18.7	14.9	10.4	14.1	NW
Calm	0.7	0.3	0.6	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.7	0.2	0.5	Calme
MEAN WIND SPEED IN KILOMETRES PER HOUR VITESSE MOYENNE DES VENTS EN KILOMETRES PAR HEURE														
N	7.9	6.6	8.0	7.0	6.9	6.7	6.1	6.4	7.1	6.6	9.7	10.0	7.4	N
NE	21.8	20.8	20.9	19.7	16.7	15.2	10.1	12.4	13.3	19.0	22.1	23.7	18.0	NE
E	20.5	18.0	15.4	16.1	14.6	12.0	9.9	11.1	10.6	13.3	17.7	22.1	15.1	E
SE	12.4	12.0	12.0	12.2	13.4	12.3	10.3	10.4	10.8	11.3	11.7	14.1	11.9	SE
S	6.1	6.1	6.8	6.4	6.4	7.2	7.7	7.0	7.5	7.4	6.2	7.3	6.8	S
SW	14.1	15.0	13.6	13.6	13.3	11.8	11.3	11.6	12.3	13.9	14.2	16.3	13.4	SW
W	23.7	24.6	23.6	19.5	16.2	13.8	13.6	13.4	16.7	18.2	21.9	23.5	19.1	W
NW	19.7	27.3	24.4	21.3	21.9	17.9	17.7	18.8	21.1	22.4	26.6	27.9	22.3	NW
All Directions	19.2	21.0	19.2	17.2	15.5	13.1	12.0	12.8	14.1	16.2	18.7	20.6	16.6	Toutes directions
Maximum Hourly Speed	80	68	77	69	80	61	45	47	60	76	68	68	80	Vitesse horaire maximale
	E	SVL	SVL	W	SVL	W	NW	NW	NE	NE	NW	SVL	SVL	

Height of anemometer 10.1 m hauteur de l'anémomètre

STATION INFORMATION

The anemometer is located in an open field approximately 200 m southeast of the Brunswick Smelting Company plant. The northern semi-circle is the Bay of Chaleur which is approximately ½ km from the anoemometer tower. To the south the countryside is flat and relatively open.

DONNÉES RELATIVES À LA STATION

L'anemometre est situé sur un terrain degagé à environ 200 m au sud-est de l'usine de la Brunswick Smelting Company. Au nord, sur un angle de 180°, se trouve la Baie des Chaleurs qui est à envrio ½ km du mât de l'anemomtre. Au sud la campagne est plate et relativement degagee.

SOILS INVESTIGATION
CARREFOUR SUR LA MER
JACQUES BOUCHER ARCHITECTE LTEE.
GLOUCESTER COUNTY, N.B.

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3.0 SITE GEOLOGY 2

4.0 SUBSURFACE CONDITIONS 2

5.0 DISCUSSION AND RECOMMENDATIONS 3

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5.2 Pile Foundation 3

6.0 GENERAL 4

******

APPENDIX

SOILS INVESTIGATION
CARREFOUR SUR LA MER
JACQUES BOUCHER ARCHITECTE LTEE.
GLOUCESTER COUNTY, N.B.

1.0 INTRODUCTION

Sub Surface Surveys, acting at the request of Jacques Boucher, Architecte Ltee., has carried out a soils investigation for a proposed building to be located between the fishery school and wharf, near the coastline, in the Town of Caraquet, Gloucester County, New Brunswick.

The purpose of this investigation was to obtain information on the subsurface conditions necessary for the design and construction of the proposed facility.

This report contains our findings and Figure F1791-1 attached in the Appendix shows the general location of the proposed facility and boreholes.

2.0 PROCEDURE

Five (5) boreholes were drilled in the vicinity of the proposed facility, with additional boreholes (1 and 7) drilled nearby in a parking lot area and on the coastline. The boreholes were drilled using a track mounted mobile auger drill.

Representative soil samples were obtained, for subsequent examination, testing and classificaiton. Six (6) of the boreholes were drilled to bedrock, with borehole 7 being terminated 1.8 metres below existing grade.

3.0 SITE GEOLOGY

In general, the area in the vicinity of the proposed building is relatively flat with very little vegetative cover. The area was covered with sandstone boulders less than 600 mm in diameter. It was necessary to move some of the boulders before drilling commenced.

4.0 SUBSURFACE CONDITIONS

The results of the field investigation are described below and presented on the attached Borehole Records and grain size distribution chart. In general the area designated for the proposed building is underlain with a layer of loose silty sand with traces of clay and gravel approximately 4 metres in depth. A dark gray clayey silt and sand, with some gravel, was encountered at a depth of 2 metres in borehole 2. The borings were terminated on bedrock encountered at the 4 metre depth.

Groundwater level, at the time of investigation, was approximately 2 metre (elev. 1.1 m) below existing grade. Elevations in this report are referenced to the floor slab of a tunnel passing under the main road.

Borehole 1 evidenced a 6.7 m surficial layer of loose silty sand with some gravel and a trace of clay before encountering sandstone bedrock.

A 1.8 m surface layer of loose silty sand with a trace of clay and gravel was encountered in borehole 7, located in the parking lot. Drilling was terminated at a depth of 1.8 m below existing grade at this borehole. No ground water level was observed in this borehole.

5.0 DISCUSSION AND RECOMMENDATIONS

For site development at the proposed building location, it is recommended that either the loose soils be excavated and replaced with compacted fill, or a piled foundation be used for the building frame support. It is understood that a piled foundation will probably be used.

5.1 Excavation and Backfill Foundation

The loose silty sand will not provide adequate soil bearing pressures necessary for the structure. The silty sand would have to be excavated and replaced with a compacted fill material. This requires dry working conditions which may be difficult to maintain in this situation, due to the high water levels.

Backfill should consist of granular material, placed in 300 mm lifts, uncompacted thickness, and compacted to 95 percent of maximum dry density as determined by ASTM D1557, Modified Proctor.

Footings supported on the backfill may be designed for a bearing pressure of 200 kPa, and a minimum footing width is recommended at 600 mm. A 1.8 m burial depth is also recommended for frost protection.

5.2 Pile Foundation

It is recommended that 230 mm (minimum outside diameter) steel tipped pipe piles or 200 mm steel H sections be used for pile foundation design. A minimum wall thickness of 13 mm is recommended for lateral deflection considerations and to provide an allowance for corrosion.

Lateral deflections for pipe piles are expected to be less than 10 mm using an allowable load of 450 KN and a pile length of approximately 5 metres. No problems are anticipated in using this length of pile as the depth to bedrock is less than 4.3 m below existing grade, indicated by boreholes 2 to 6.

The piles are to be driven to refusal. No difficulties are anticipated during pile driving through the loose silty sand. Piles should be properly aligned prior to driving, and any boulders at the surface that may cause misalignment should be removed.

Pile caps should be placed 1.8 m below final grade for frost protection or alternatively, the pile caps could be insulated.

6.0 GENERAL

This report has presented the results of our soils investigation for the proposed building in Caraquet, New Brunswick.

A soils investigation entails random sampling of a site, and subsurface conditions may vary between exploration points. Should soil conditions differ from those described herein, Sub Surface Surveys request that they be notified in order to review the site and provide modifications to the recommendations, if necessary.

Yours Truly,
SUB SURFACE SURVEYS

Paul S. Belyea, P.Eng.
/kp
Attachments

APPENDIX

SYMBOLS AND TERMS

BOREHOLE RECORDS

GRAIN SIZE DISTRIBUTION CURVE

LOCATION PLAN

SUB SURFACE SURVEYS

BOREHOLE RECORD

1

CLIENT Jacques Boucher, Architecte Ltee.

PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet

BOREHOLE No. 1

DATES: BORING 88 08 10 WATER LEVEL N.A.

DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY mm	SAMPLES N-VALUE OR RQD
0	2.08							
0		Loose brown and reddish SILTY SAND with some GRAVEL trace clay			ST	1	600	8
1								
2	0.56	Loose gray SILTY SAND with some GRAVEL and CLAY			ST	2	400	5
3		Grades to compact. Gray and red SILTY SAND grades to black			ST	3	355	22
					ST	4	600	17
	-1.27	Compact gray and red SILTY CLAYEY SAND with some GRAVEL						
4								
5					ST	5	600	11
6		Grades to dense						
	-4.63				ST	6	255	32
7		Gray SANDSTONE End of hole						
8								
9								
10								
11								

UNDRAINED SHEAR STRENGTH - kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90

SUB SURFACE SURVEYS

BOREHOLE RECORD 2

CLIENT Jacques Boucher, Architecte Ltee. PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet BOREHOLE No. 2

DATES: BORING 88 08 10 WATER LEVEL 0.92m DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD
	3.21						mm	
0		Loose gray SILTY SAND with trace of clay and gravel			ST	1	600	10
1								
2	1.07				ST	2	175	6
		Loose dark gray CLAYEY SILT and SAND with some gravel			ST	3	600	5
3					ST	4	600	8
	0.75							
4		Gray SANDSTONE End of hole						
5								
6								
7								
8								
9								
10								
11								

UNDRAINED SHEAR STRENGTH - kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90

SUB SURFACE SURVEYS

BOREHOLE RECORD 3

CLIENT Jacques Boucher, Architecte Ltee — PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet — BOREHOLE No. 3

DATES: BORING 88 08 10 — WATER LEVEL 0.92m — DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY mm	SAMPLES N-VALUE OR RQD
0	3.30							
0		Loose gray SILTY SAND some GRAVEL with trace of clay			ST	1	600	10
2		Small layer of gray sand			ST	2	600	6
2					ST	3	600	4
3					ST	4	600	4
4	0.97							
5		Gray SANDSTONE End of hole						

UNDRAINED SHEAR STRENGTH - kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90

SUB SURFACE SURVEYS

BOREHOLE RECORD 4

CLIENT Jacques Boucher, Architecte Ltee. PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet BOREHOLE No. 4

DATES: BORING 88 08 10 WATER LEVEL 1:20m DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY mm	SAMPLES N-VALUE OR RQD
0	3.44							
		Loose brown to gray SILTY SAND with trace of clay and gravel			ST	1	600	7
1								
	1.92							
2		Compact dark gray SILTY SAND with trace clay			ST	2	600	15
					ST	3	600	8
3		Grades to loose			ST	4	600	5
	-0.52							
4		Hard gray SANDSTONE End of hole						
5								
6								
7								
8								
9								
10								
11								

UNDRAINED SHEAR STRENGTH – kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90

SUB SURFACE SURVEYS

BOREHOLE RECORD 5

CLIENT Jacques Boucher, Architecte Ltee

PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet

BOREHOLE No. 5

DATES: BORING 88 08 10

WATER LEVEL 1.40m

DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY mm	SAMPLES N-VALUE OR RQD
0	3.79							
		Loose brown to gray SILTY SAND with trace of clay and gravel			ST	1	355	4
1								
	2.27							
2		Loose grey SILTY SAND with trace of clay and gravel			ST	2	510	2
					ST	3	600	9
3		Grades to compact			ST	4	600	12
					A ST	5	75	39/150
4	-0.17							
	-0.57	Augered into sandstone						
		Gray SANDSTONE End of hole						
5								
6								
7								
8								
9								
10								
11								

UNDRAINED SHEAR STRENGTH - kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90

SUB SURFACE SURVEYS

BOREHOLE RECORD 6

CLIENT Jacques Boucher, Architecte Ltee — PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet — BOREHOLE No. 6

DATES: BORING 88 08 10 — WATER LEVEL 1.48m — DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD
	3.61						mm	
0		Loose brown SILTY SAND with some GRAVEL and trace of clay.			ST	1	200	6
1					A			
	2.09	Loose dark gray SILTY SAND with a trace of clay and gravel			ST	2	600	5
2				▼	ST	3	600	5
3		Grades to compact			ST	4	600	11
					A			
4	-0.52	Gray SANDSTONE End of hole						
5								
6								
7								
8								
9								
10								
11								

UNDRAINED SHEAR STRENGTH – kPa

10 20 30 40 50 60 70 80 90

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

SUB SURFACE SURVEYS

BOREHOLE RECORD 7

CLIENT Jacques Boucher Architecte Ltee — PROJECT No. F 1791

LOCATION Carrefour Sur La Mer - Caraquet — BOREHOLE No. 7

DATES: BORING 88 08 10 — WATER LEVEL — DATUM Slab

DEPTH (m)	ELEVATION (m)	SOIL DESCRIPTON	STRATA PLOT	WATER LEVEL	SAMPLES TYPE	SAMPLES NUMBER	SAMPLES RECOVERY	SAMPLES N-VALUE OR RQD
							mm	
0	3.86	Loose SILTY SAND with trace of clay			ST	1	600	4
1		Grades to grey with traces of gravel, becoming compact			ST	2	600	9
					ST	3	600	22
2	2.03	End of hole						
3								
4								
5								
6								
7								
8								
9								
10								
11								

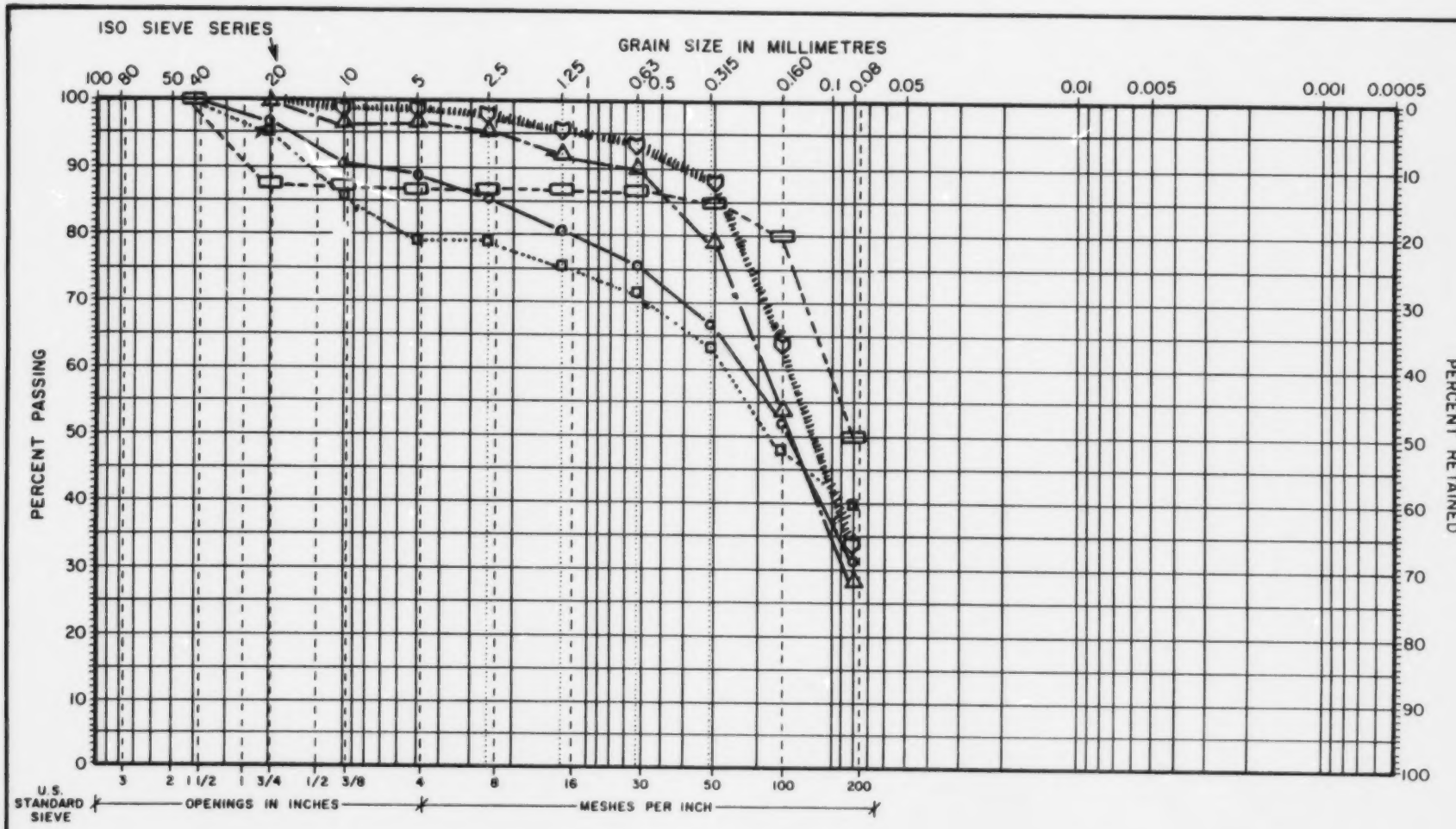
UNDRAINED SHEAR STRENGTH - kPa

WATER CONTENT & ATTERBERG LIMITS W_P W W_L

DYNAMIC PENETRATION TEST, BLOWS / 0.3m X

STANDARD PENETRATION TEST, BLOWS / 0.3m ●

10 20 30 40 50 60 70 80 90


ISO SIEVE SERIES
GRAIN SIZE IN MILLIMETRES
100 80 50 40 20 10 5 2.5 1.25 1 0.63 0.5 0.315 0.160 0.1 0.08 0.05 0.01 0.005 0.001 0.0005
PERCENT PASSING
PERCENT RETAINED
100 90 80 70 60 50 40 30 20 10 0
U.S. STANDARD SIEVE
3 2 1 1/2 1 3/4 1/2 3/8 4 8 16 30 50 100 200
OPENINGS IN INCHES
MESHES PER INCH

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

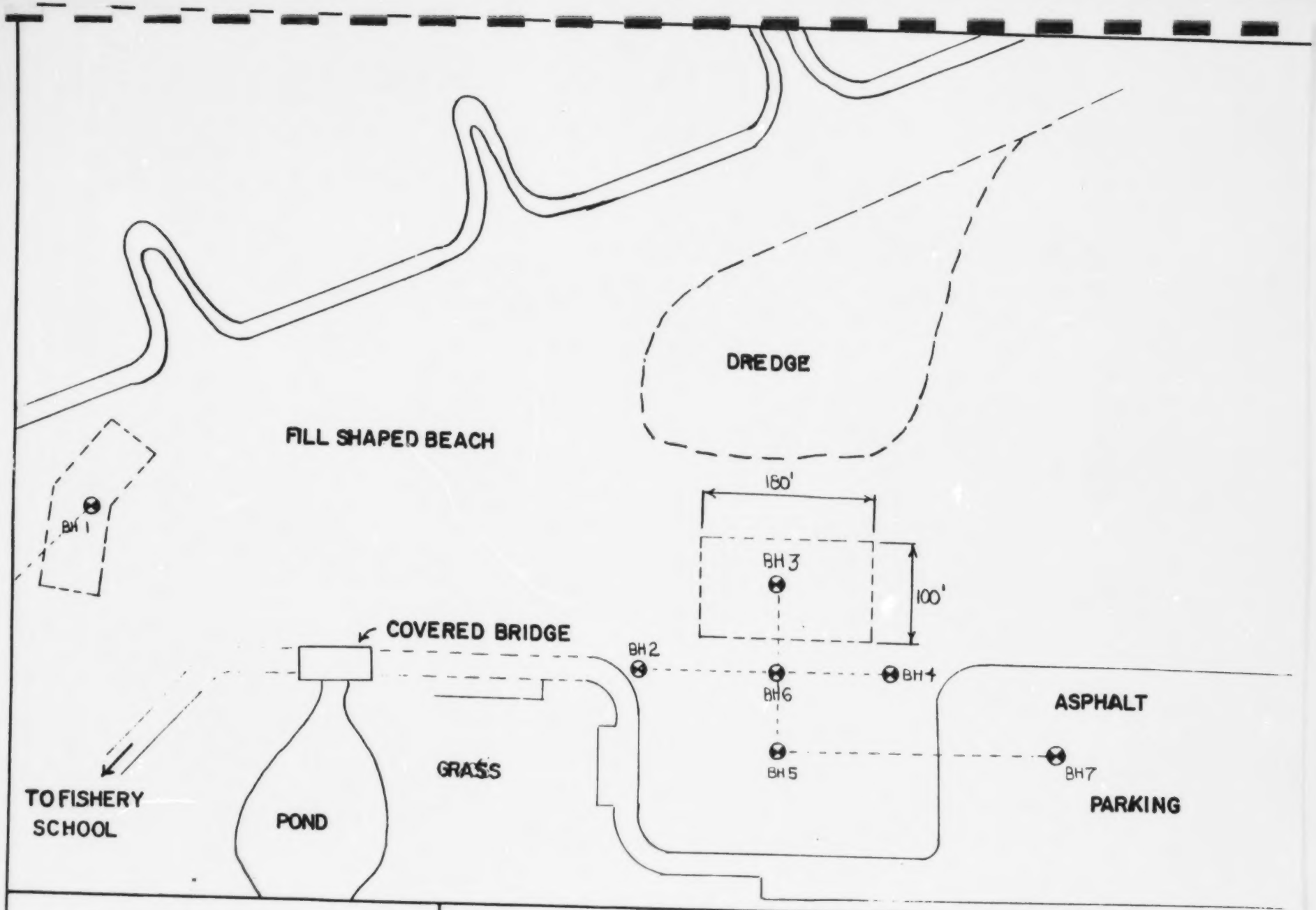
UNIFIED SOIL CLASSIFICATION

SOURCE	SYMBOL	SAMPLE	DEPTH	DESCRIPTION
BH 1		2	1.5 to 2.1m	Silty sand with some gravel and clay
BH 1		5	4.9 to 5.2m	Silty clayey sand with some gravel
BH 5		2	1.5 to 2.1m	Silty sand trace clay and gravel
BH 2		3	2.1 to 2.7m	Silty sand some clay and gravel
BH 6		2	1.5 to 2.1m	Silty sand trace clay and gravel

SUB SURFACE SURVEYS

GRAIN SIZE DISTRIBUTION

FIGURE No.
PROJECT F 1791

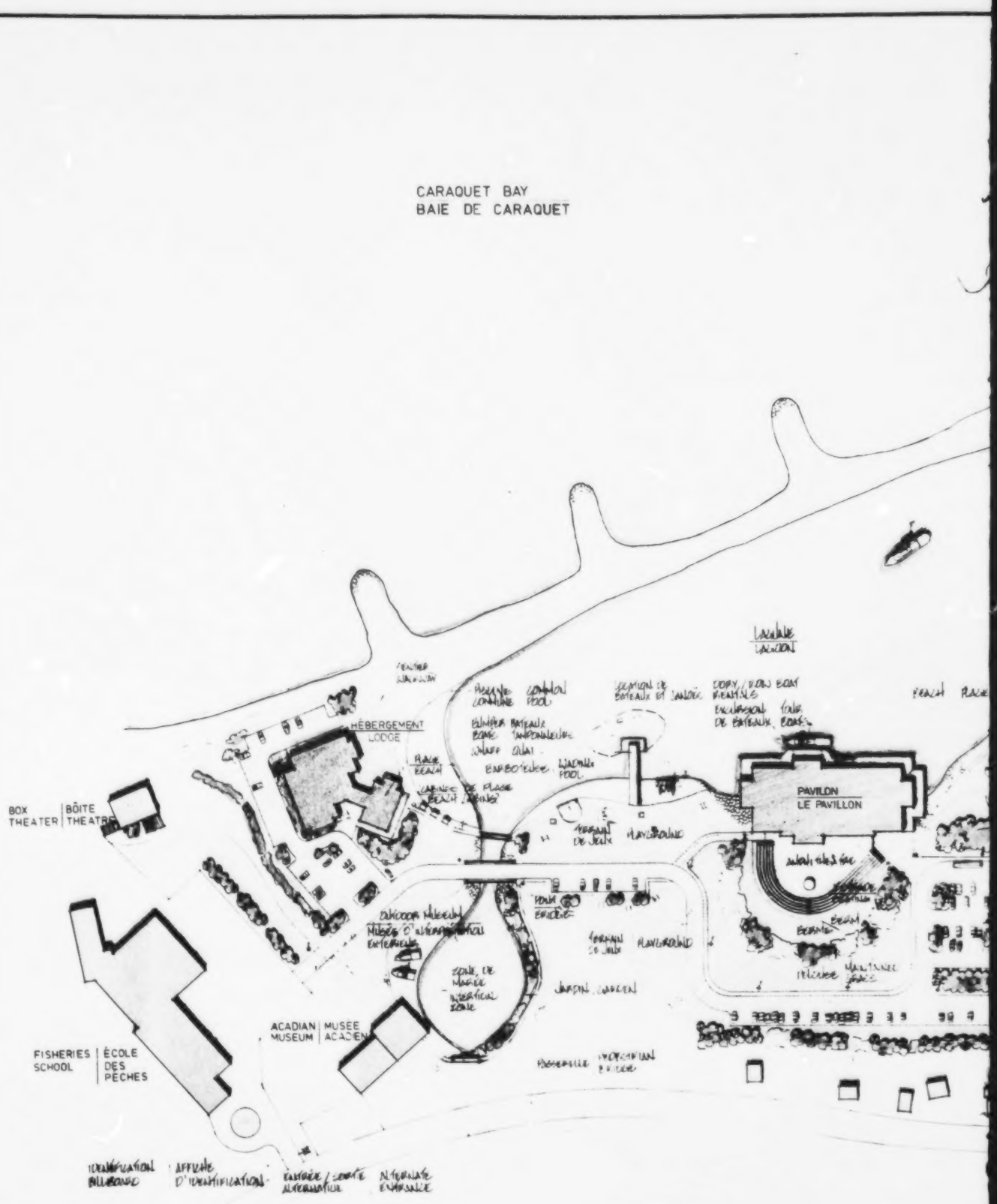


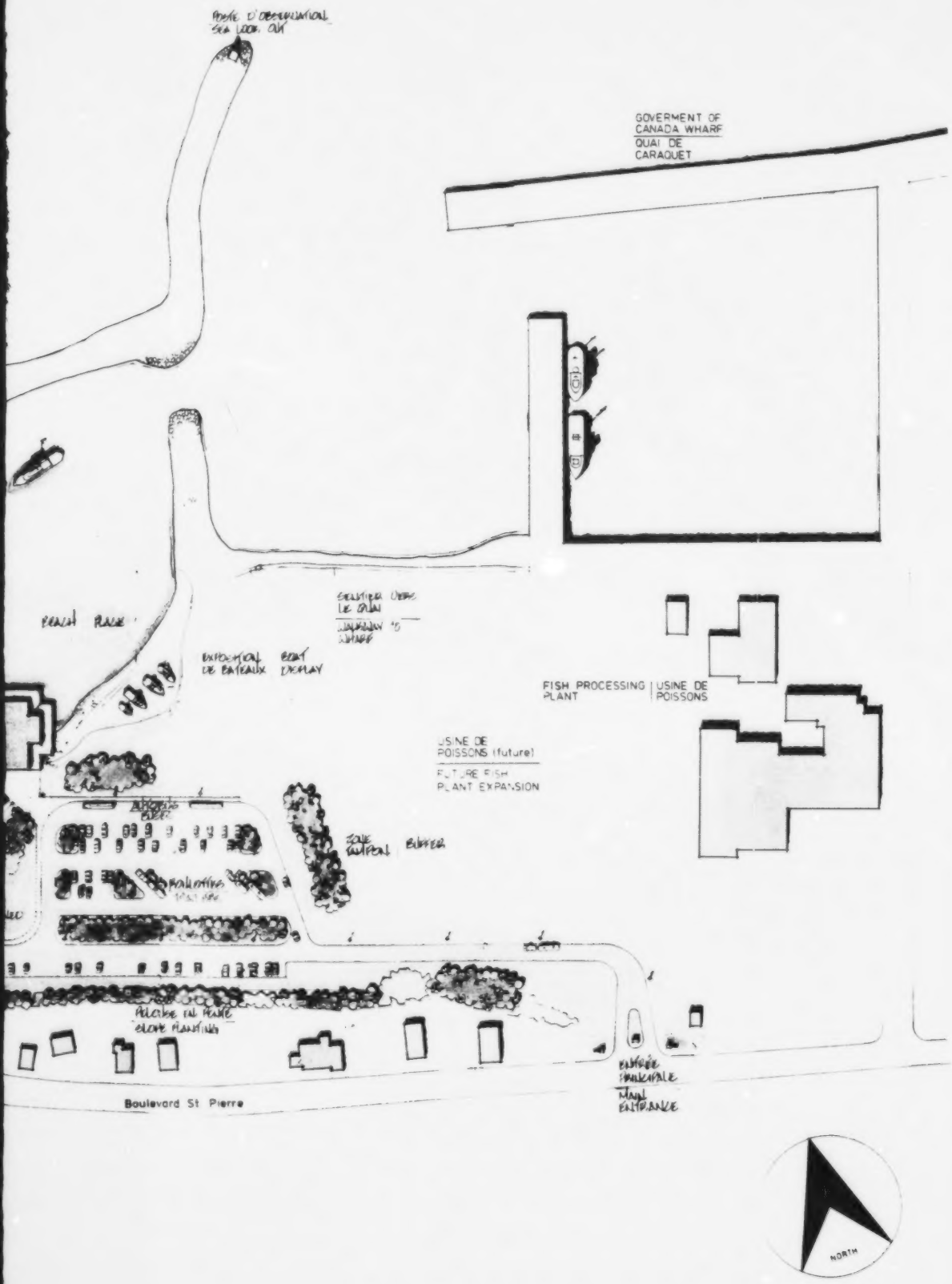
BORE HOLE LOCATION PLAN

SUB SURFACE SURVEYS

GEOTECHNICAL ENGINEERS

DATE: 88 09 27	SCALE: NTS
DRAWN BY: MJV	APPROVED BY:
FIGURE No: F1791-1	APPROVED BY:


CARAQUET BAY
BAIE DE CARAQUET
HÉBERGEMENT
LODGE
BOX THEATER | BÔITE THEATRE
PAVILON
LE PAVILLON
ACADIAN MUSEUM | MUSÉE ACADIEN
FISHERIES SCHOOL | ÉCOLE DES PÊCHES



NOTES

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(506) 548 4828

No	Date	Revisions / Revisions

Projet / Project
CARREFOUR de la MER
CARAQUET

Titre / Title
PLAN DU DEVELOPEMENT
DEVELOPMENT PLAN

Echelle / Scale

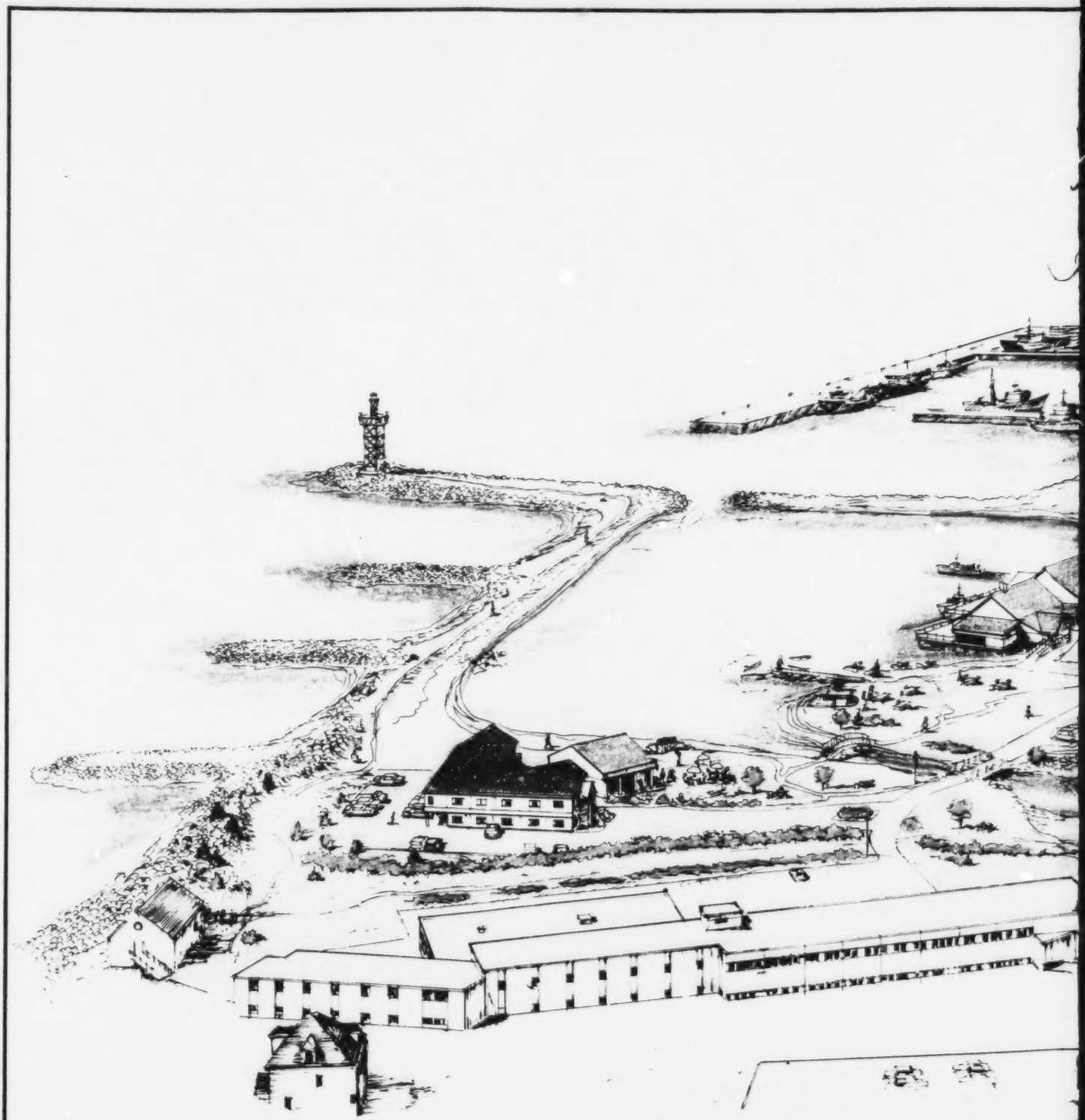
Sceau/Stamp

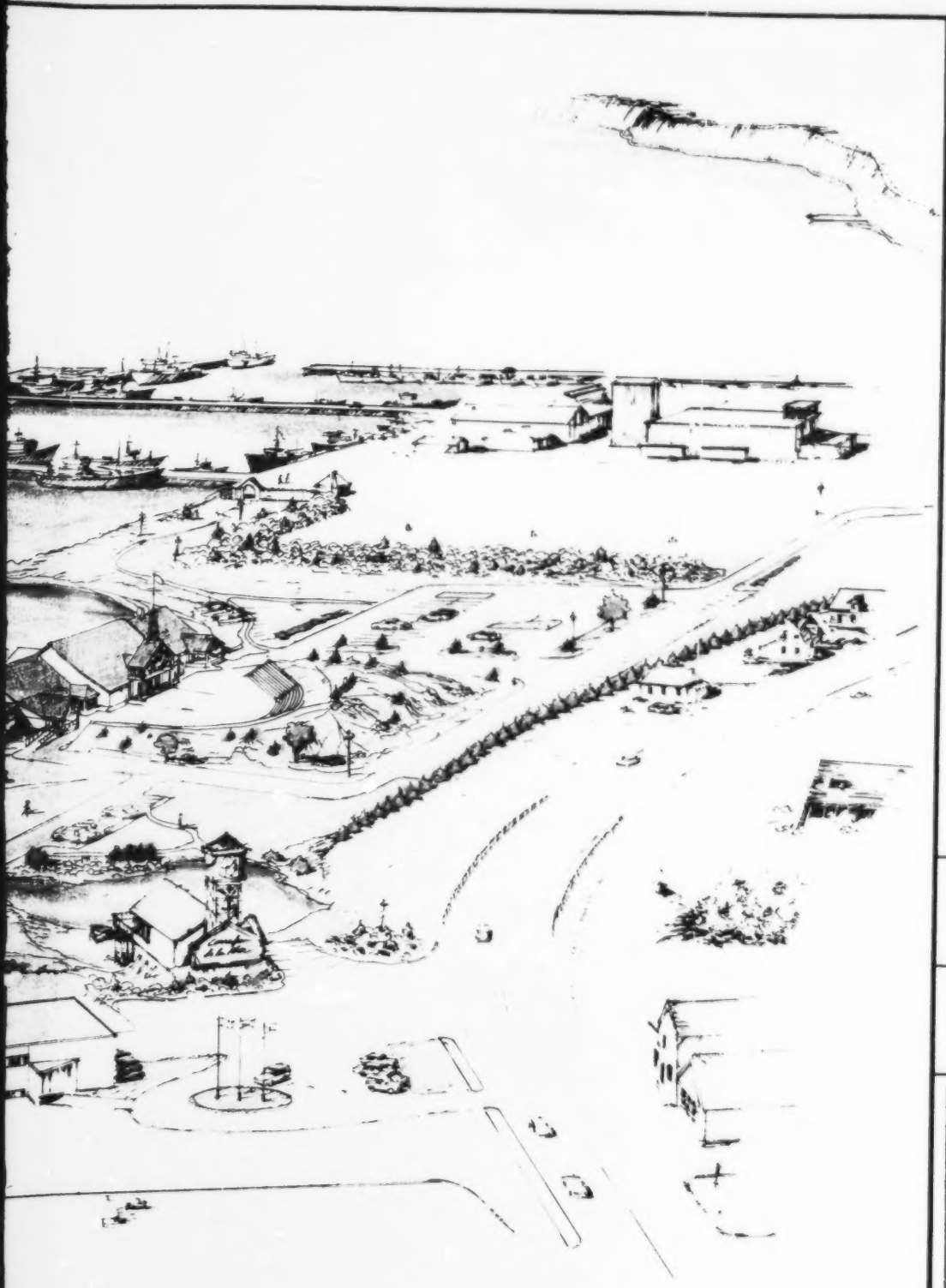
dossier/file

par/by J.S.–J.B.

date OCT. 1988

D1 de/of 1





NOTES

A detail no.
no. de detail
B location drawing no.
no. dessin no.
C drawing no.
dessin no.

A
B

A
B C

JACQUES BOUCHER ARCHITECTE LTEE
621, rue Sainte-Anne BATHURST, N.-B. E2A 2N5
(506) 548 4959

No	Date	Revisions

Projet / Project

CARREFOUR de la MER
CARAQUET

Titre / Title

PERSPECTIVE

Echelle / Scale

1:250

Sceau/Stamp

REGISTERED ARCHITECT
Jacques Boucher
NEW BRUNSWICK

dossier/file

par/by G.L. J.B.

date OCT. 1988

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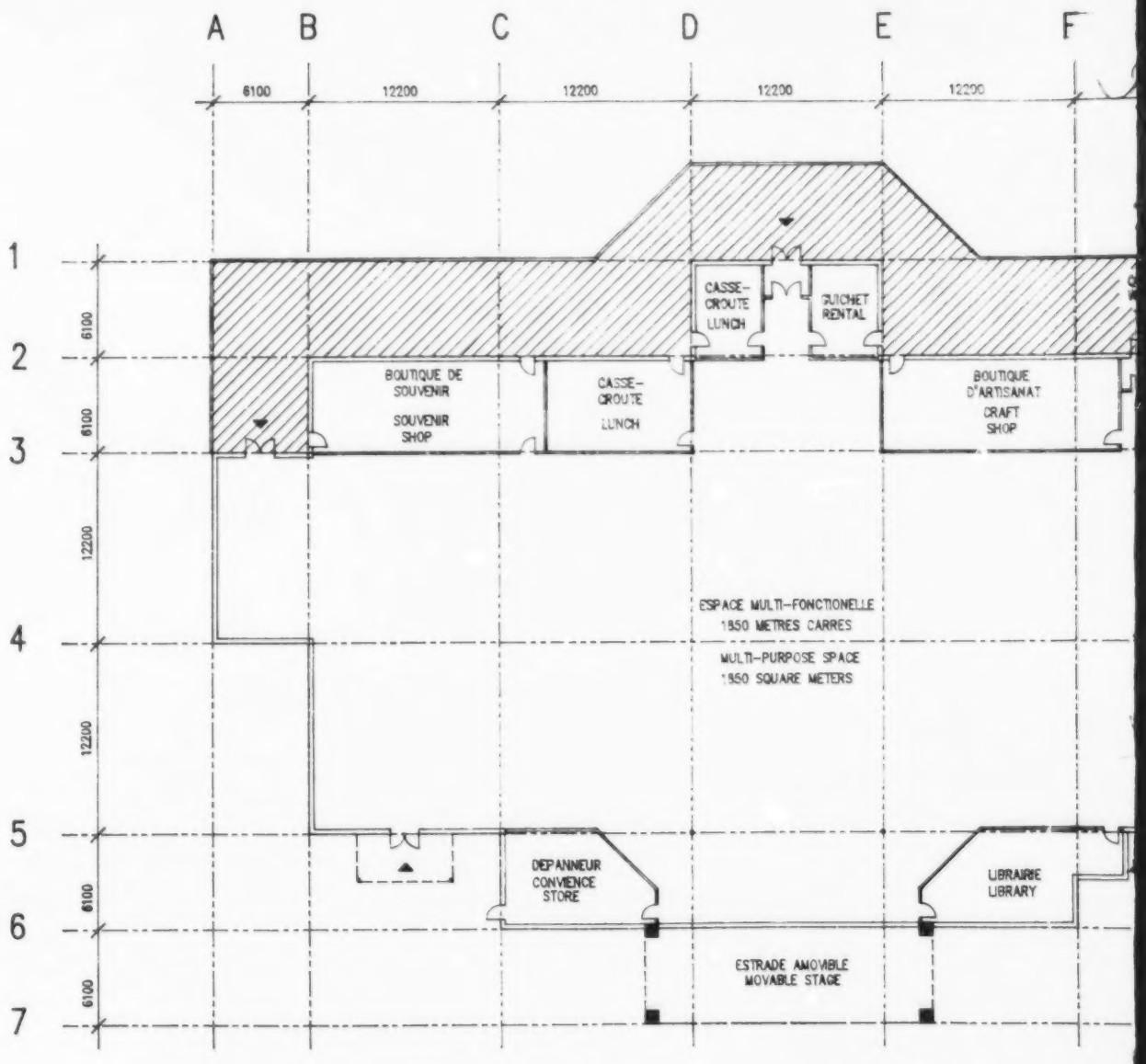
A
B
C
D
E
F
6100
12200
12200
12200
12200
1
2
3
4
5
6
7
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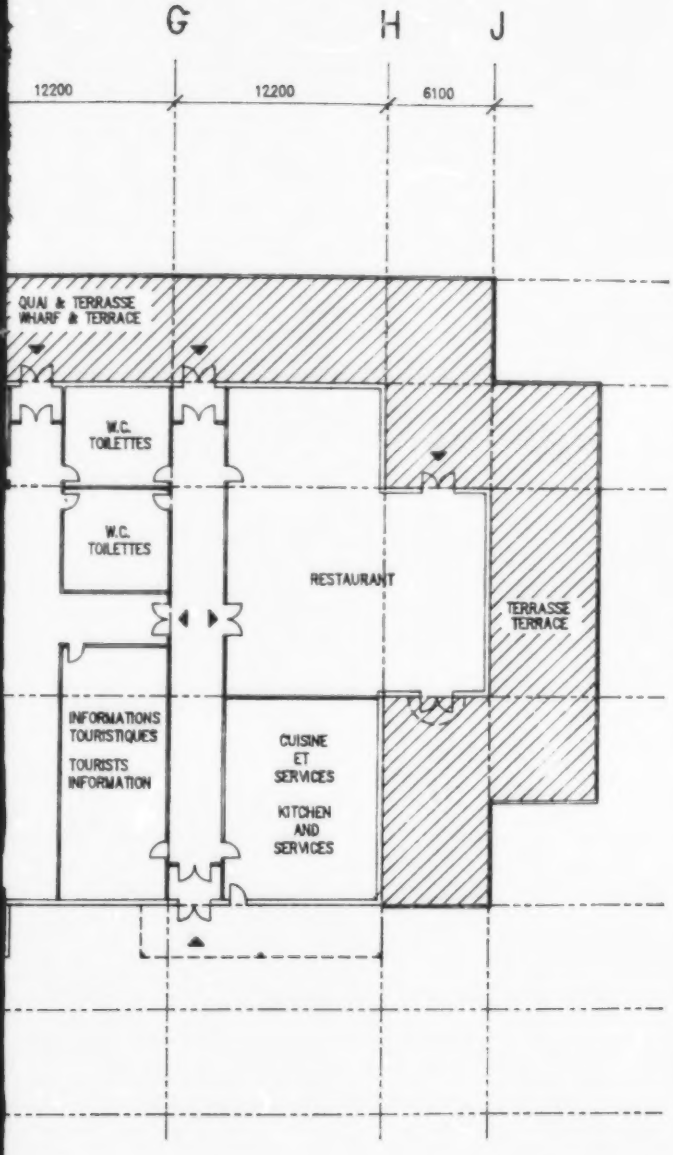
6100
12200
12200
6100
6100
CASSE-
CROUTE
LUNCH
JUCHET
RENTAL
BOUTIQUE DE
SOUVENIR
SOUVENIR
SHOP
CASSE-
CROUTE
LUNCH
BOUTIQUE
D'ARTISANAT
CRAFT
SHOP
ESPACE MULTI-FONCTIONELLE
1850 METRES CARRES
MULTI-PURPOSE SPACE
1850 SQUARE METERS
DEPANNEUR
CONVIENCE
STORE
LIBRAIRIE
LIBRARY
ESTRADE AMOVIBLE
MOVABLE STAGE



PLAN DE PLANCHER / FLOOR PLAN

ECHELLE / SCALE : 1:400

NOTES

A detail no. / no. du détail
B location drawing no. / no. dessin no.
C drawing no. / dessin no.

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No.	Date	Revisions

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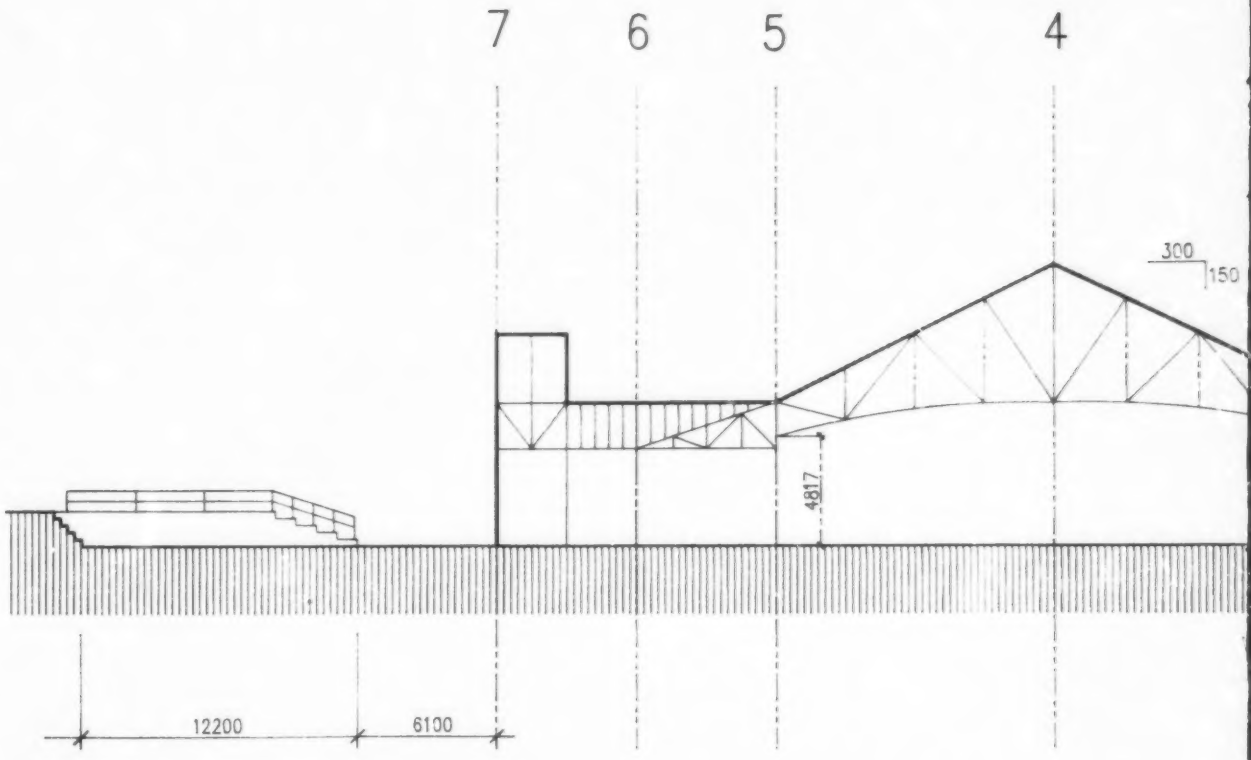
CARREFOUR de la MER
CARAQUET

Titre / Title
PLAN DE PLANCHER
FLOOR PLAN

Echelle / Scale
AS NOTED

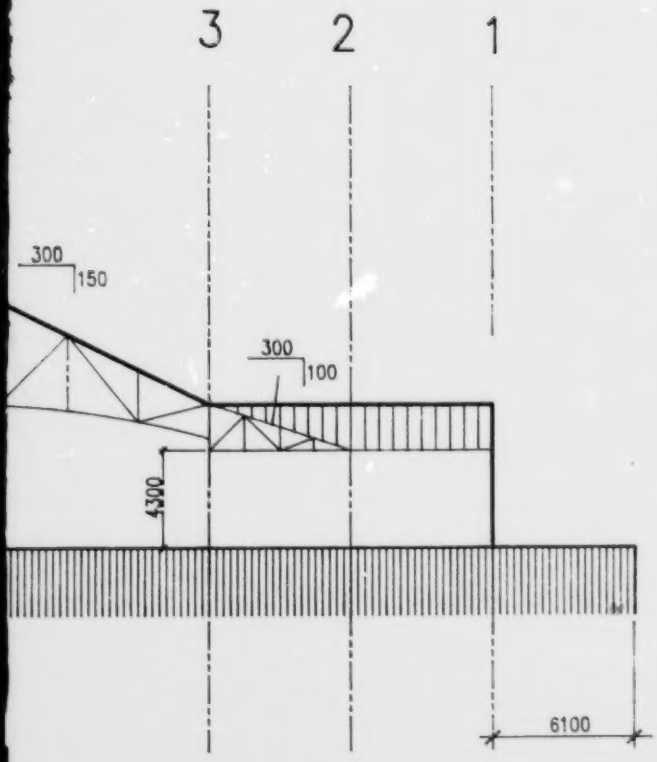
Sceau / Stamp
REGISTERED ARCHITECT
Jacques Boucher
NEW BRUNSWICK

dossier / file
par / by JMH
date OCT. 88
RA2 de / of 8



COUPE TRA

ECHELLE / SCALE : 1:300



PE TRANSVERSALE / CROSS SECTION

SCALE : 1:300

NOTES

A detail no. / no. de détail
B location drawing no. / no. sur dessin no.
C drawing no. / dessin no.

JACQUES BOUCHER ARCHITECTE LTEE
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No	Date	Revisions

Projet / Project
CARREFOUR de la MER
CARAQUET

Titre / Title
COUPE TRANSVERSALE
CROSS SECTION

Echelle / Scale
AS NOTED

Sceau/Stamp: REGISTERED ARCHITECT Jacques Boucher NEW BRUNSWICK

dessiné/file
par/by JBH
date OCT. 88

RA3 de/of 8

NOTES

A
B

A
B C

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427, rue Sainte-Anne BATHURST, N.-B. E2A 2M5
(506) 548 4458

No.	Date	Revisions

Projet / Project

CARREFOUR de la MER
CARAQUET

Titre / Title

EDIFICE POLYVALENT
PERSPECTIVE
MULTI-PURPOSE BLDG.

Echelle / Scale

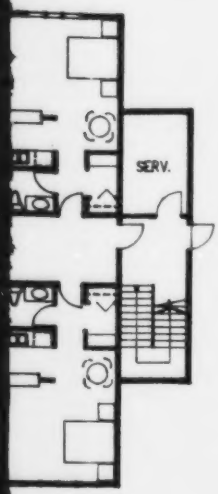
Sceau/Stamp

REGISTERED ARCHITECT
PROVINCE DU NOUVEAU-BRUNSWICK

dossier/file	
par/by	G.L. J.B.
date	OCT. 1988
	RA4 de/of 8

REZ-de-CHAUSSEE/MAIN FLOOR PLA

ECHELLE/SCALE: 1:250



LOOR PLAN

NOTES

A B

A detail no.
no. du détail
B location drawing no.
sur dessin no.
C drawing no.
dessin no.

A B C

JACQUES BOUCHER ARCHITECTE LTEE
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(506) 546 4629

No	Date	Revisions

Projet / Project
CARREFOUR de la MER
CARAQUET

Titre / Title
HEBERGEMENT et PISCINE
LODGE & POOL

Echelle / Scale
1:250

Sceau/Stamp
REGISTERED ARCHITECT
Jacques Boucher
NEW BRUNSWICK

dossier/file

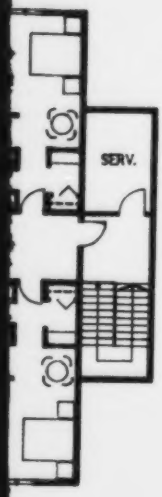
par/by A.R.

date OCT. 1988

RA5 de/of 8

DEUXIEME ETAGE/SECOND FLOOR P

ECHELLE/SCALE: 1:250



OOR PLAN

NOTES

A
B

A
B C

JACQUES BOUCHER ARCHITECTE LTEE

No | Date | Revisions

Projet / Project

CARREFOUR de la MER
CARAQUET

Titre / Title

HEBERGEMENT et PISCINE
LODGE & POOL

Echelle / Scale

Sceau/Stamp

dossier/file

par/by A.R.

date OCT. 1988

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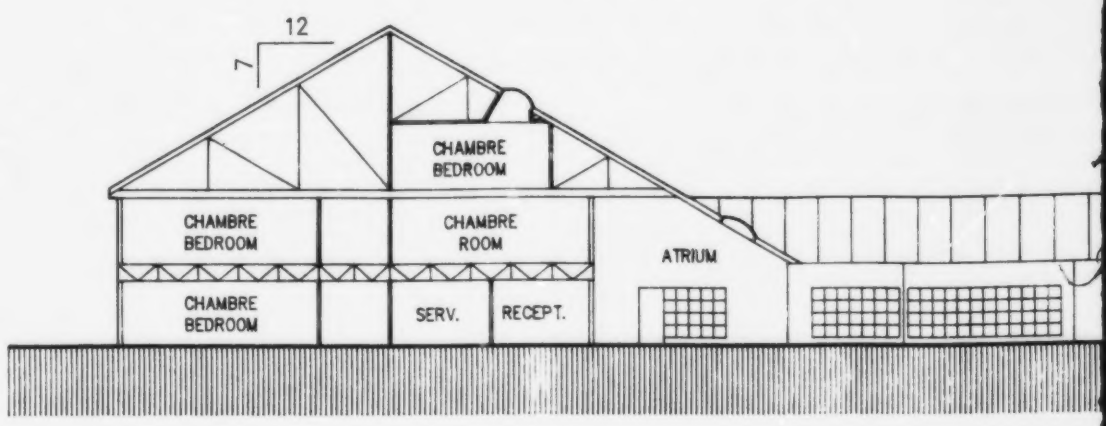
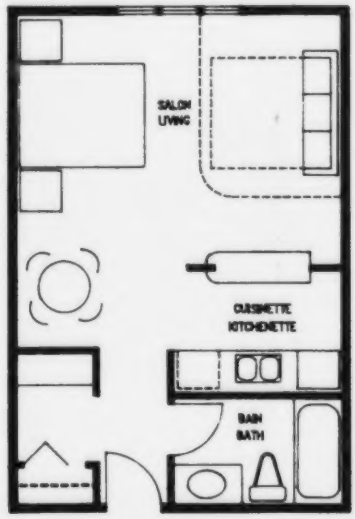
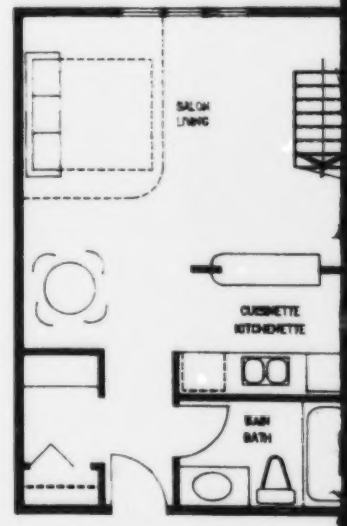


COUPE TRANSVERSALE/CROSS-SECTIO

ECHELLE/SCALE: 1:250

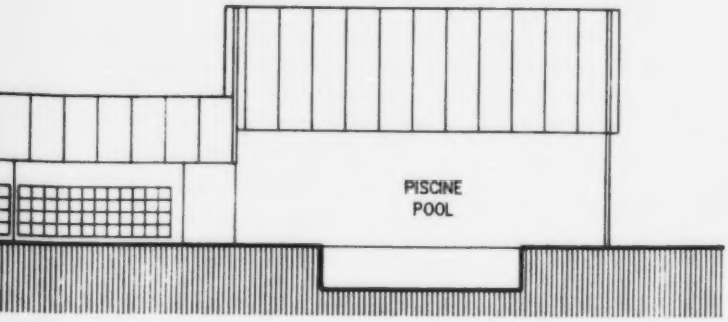




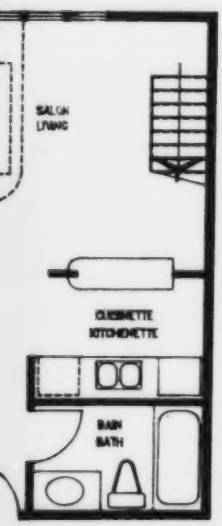
UNIT A/UNITE A

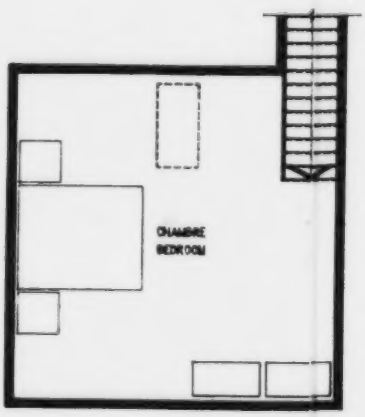
CHAMBRES TYPIQUES/TYPICA

ECHELLE/SCALE: 1:100



SECTION





UNIT B/UNITE B

TYPICAL ROOMS

NOTES

A B

A
B C

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No	Date	Revisions / Revisions

Projet / Project

CARREFOUR de la MER
CARAQUET

Titre / Title

HEBERGEMENT et PISCINE
LODGE & POOL

Echelle / Scale

Sceau/Stamp

REGISTERED ARCHITECT
NEW BRUNSWICK

dossier/file

par/by A.R.

date OCT. 1988

RA7 de/of 8

NOTES

A détail no.
no. du détail

B location drawing no.
voir détail no.

C drawing no.
dessin no.

A
B

A
B C

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No	Date	Revisions

Projet / Project

CARREFOUR de la MER
CARAQUET

Titre / Title

LODGE
PERSPECTIVE
d'HEBERGEMENT

Echelle / Scale

Sceau/Stamp

REGISTERED ARCHITECT
Jacques Boucher
NEW BRUNSWICK

dossier/file

par/by G.L. J.B.

date OCT. 1988

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